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Report of the Commissioner of the Environment and Sustainable Development to the House of Commons

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Report of the

Commissioner of the Environment and Sustainable Development

to the House of Commons

1997

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OFFICE OF THE AUDITOR GENERAL



CANADA

BUREAU DU VÉRIFICATEUR GÉNÉRAL

To the Honourable the Speaker of the House of Commons:

On behalf of the Auditor General of Canada, I have the honour to transmit herewith my Report to the House of Commons for the year 1997, to be laid before the House in accordance with the provisions of section 23(3) of the *Auditor General Act*.

Brian Emmett
Commissioner of the Environment and Sustainable Development

OTTAWA, March 1997

TO THE READER:

I welcome your comments and suggestions on this report, the proposed work plan, and other issues related to the environment and sustainable development. I can be reached at:

Brian Emmett

The Commissioner of the Environment and Sustainable Development

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Ottawa, Ontario

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Report of the Commissioner of the Environment and Sustainable Development to the House of Commons for 1997

Main Points

1. This is my first report to Parliament, and the first report by a Commissioner of the Environment and Sustainable Development. It provides me with the opportunity to set out my mandate, my priorities and my work program. The report also presents my personal perspective on some of the issues that are of crucial importance to my role.

2. The post of Commissioner was established because of concern about the federal government's performance in protecting the environment and fostering sustainable development. Greater accountability is an important force for enhancing government performance. My role is to provide objective, independent analysis and recommendations to members of Parliament to help them examine the federal government's actions and hold it to account.

3. My mandate includes both environmental and sustainable development issues. A healthy environment is critical for a prosperous economy and for our broader social well-being. Sustainable development recognizes the importance we attach to caring for people and the environment, both at the same time.

4. Previous work by the Office of the Auditor General has identified key weaknesses in the federal government's management of sustainable development issues: the gap between commitments and concrete action; a lack of co-ordination among departments and across jurisdictions; and inadequate review of performance and provision of information to Parliament. We will continue to focus attention on these management weaknesses and the success and failure of departments in dealing with them.

5. Our work program for the next two years has four main components: the review of sustainable development strategies now being prepared by 24 federal departments and agencies; auditing of key environmental and sustainable development issues like environmental assessment, climate change and sustainable fisheries; special studies of issues like Canada's international commitments and public and private sector performance; and monitoring public petitions on environmental and sustainable development issues.

6. While there are no quick fixes, I am confident that government can be a positive force in fostering sustainable development. Even in this era of cost cutting and deficit reduction, governments must be there to provide strong leadership and a clear vision. They must also show that they are willing to change their own behaviour, and to exercise their responsibilities as stewards of our natural environment.

7. The challenge can be met. What we need is the will, the discipline and the management commitment to translate talk into action.

Commissioner's Perspective

My first report

8. This is my first report to the House of Commons, and the first report by a Commissioner of the Environment and Sustainable Development. In preparing this report, I have consulted with parliamentarians and stakeholders on their expectations. The report describes my mandate, outlines my priorities and presents my work program for the coming years. It sets the stage for future reports on the federal government's efforts to protect the environment and foster sustainable development.

Performance and accountability

9. By enacting the amendments to the *Auditor General Act* that created my position (see Appendix A), parliamentarians sent a strong message to Canadians. They indicated that they shared Canadians' concern about the quality of our environment and our desire for sustainable development. They formally committed themselves to encouraging stronger performance by the federal government in both areas.

10. My job is to assist parliamentarians in that task. I will provide objective, independent analysis and recommendations to members of Parliament to help them examine the federal government's performance and hold it to account for that performance. I also plan to work directly with federal departments and agencies to promote accountability and best practices in the management of environmental and sustainable development issues.

Environment *and* sustainable development

11. My position is Commissioner of the Environment *and* Sustainable Development. My perspective on both of these issues is therefore fundamental to my approach to the job, and to the objectives and priorities that I have established to guide my work.

12. I have been working on environmental and sustainable development issues for most of my career. Based on that experience — and my professional training — I believe strongly that government has an essential role to play in protecting the environment and fostering sustainable development.

13. To achieve the results Canadians are expecting, governments must provide strong leadership and a clear vision. And if we expect to change behaviour across society, the federal government must lead by example and demonstrate that it is fostering a culture of environmental protection and sustainable development within its own departments and agencies.

14. Furthermore, I believe that a healthy environment is critical for a prosperous economy and for our broader social well-being. The environment that we share provides many of the resources that we consume and that we use to produce goods and services. And without clean air and water, or the protection provided by the earth's atmosphere, there would be no life.

15. I also believe that environmental protection is best pursued within a framework of sustainable development. The World Commission on Environment and Development defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their needs." This

My job is to assist parliamentarians.

definition was included in the amendments to the *Auditor General Act* that created the position of Commissioner, and serves as an important starting point for my work.

16. Sustainable development makes sense to me, and I think to most Canadians. Sustainable development recognizes the importance we attach to a healthy environment, to a prosperous economy and to issues of equity and fairness. It stresses the need to integrate these factors in our decision making, so that progress can be made on all of them. The goal is to take care of people and the environment that supports them, both at the same time.

17. The pursuit of sustainable development presents us with unique challenges. Can we integrate social, economic and environmental concerns? Can we provide for economic growth and social development without seriously impairing the natural environment on which we all depend? I think we can.

18. While the goal is to achieve a reasonable balance among the many elements of sustainable development that

WHAT IS SUSTAINABLE DEVELOPMENT?

A working definition of sustainable development is essential for guiding the preparation of the Commissioner's work program, and for reviewing departmental strategies.

The main elements of the concept of sustainable development emerged at the 1972 United Nations Conference on the Human Environment in Stockholm, Sweden. Central themes of the conference were the interdependence of human beings and the natural environment; the links between economic and social development and environmental protection; and the need for a global vision and common principles.

Picking up these themes, the World Commission on Environment and Development (the Brundtland Commission) released a report in 1987 calling for ". . . development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition was included in the amendments to the *Auditor General Act* that created the position of Commissioner.

The Brundtland Commission went on to say that ". . . sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs."

The federal government's *Guide to Green Government* explores the concept of sustainable development more fully. Three key elements of sustainable development are *quality of life, integrated decision making* and *equity*.

- The *quality of life* dimension recognizes that Canadians value many different aspects of their life in society, including economic and social development *and* the preservation and improvement of environmental quality. Reconciling economic development , social equity and environmental quality is at the core of sustainable development. Clearly, Canadians want an economy that performs well. A healthy economy meets demands for job creation, economic security and improved living standards. It also allows Canada to pursue the social objectives that are key elements of our quality of life — including health, education and protection of the environment — now and for future generations.

- Reconciling development and environmental quality means paying particular attention to *integrated decision making*. As the House of Commons Standing Committee on Environment and Sustainable Development has noted, "The integration of environmental and economic considerations, along with the consideration of equity, is a fundamental underpinning of the concept of sustainable development." The connections among economic, social and environmental objectives need to be acknowledged, and any conflicts among them that may emerge should be dealt with openly, on the basis of full information and taking advantage of the best tools available.

- A commitment to *equity* is a third element of sustainable development. Equity involves the fair distribution of the costs and benefits of development between the rich and the poor, between generations, and among nations. Equity also implies that we all have the means to meet basic needs, and that we are all entitled to basic rights.

Sustainable development does *not* mean business as usual for federal departments and agencies. Each department will need to consider carefully how to translate the concept into a concrete program of action.

are important to Canadians, my immediate work plan pays particular attention to the environment. Economic and social priorities have traditionally received more explicit recognition in the mandates of departments. Part of my job is to redress this imbalance by bringing the environment into the equation more systematically.

19. It has been 25 years since the key underpinnings of sustainable development were first enunciated at the United Nations Conference on the Human Environment in Stockholm. It has been 10 years since the release of the landmark document *Our Common Future* by the Brundtland Commission. And it has been five years since representatives of 178 nations gathered at Rio de Janeiro to chart a path for global sustainable development. It is time to take sustainable development seriously; to get on with the job and put the concept into practice.

20. There are few quick solutions to environmental problems, and achieving sustainable development will require persistence, sustained and focussed effort and patience. We are on a long journey, one that demands systemic change in order to make a real difference for present and future generations.

We all have a role to play

21. In performing my duties, I will be seeking advice from experts in the field of environmental and sustainable development policy and practice. A 14-member advisory committee has been struck to help me establish priorities and a work program (see Appendix D).

22. Individual Canadians also have an important role to play. Departments will be consulting with clients and stakeholders during the preparation of their strategies. And the petition process provides a formal vehicle for Canadians to comment on environmental issues that are the responsibility of federal departments, and to obtain a response.

23. I am confident that government can be a positive force in fostering sustainable development. Even in this era of cost cutting and deficit reduction, the federal government can provide strong leadership, a clear vision and a commitment to improving its own performance.

24. The challenge can be met. What we need is the will, the discipline and the management commitment to translate talk into action.

A Long-standing and Growing Concern

The international context

25. This report comes on the anniversary of three key events that have defined the domestic and international agendas for the environment and sustainable development (see Exhibit 1).

- **The 25th anniversary of the United Nations Conference on the Human Environment**. The "Stockholm Conference" recognized the interdependence of people and the environment, and the ties between economic and social development and environmental protection.

- **The 10th anniversary of the report of the World Commission on Environment and Development**. *Our Common Future* presented a global vision for sustainable development, linking social well-being to a prosperous economy and a healthy environment.

- **The fifth anniversary of the United Nations Conference on Environment and Development**. The "Rio Conference" focussed on the globalization of

Sustainable development recognizes the importance we attach to a healthy environment, to a prosperous economy and to issues of equity and fairness.

environmental issues and the need for international co-operation to ensure sustainable development.

26. Countries around the world are taking stock of progress made in protecting the environment and fostering sustainable development. What have we accomplished? What have we learned? What do we do next? Canada has made progress, but there is still a lot to do.

Exhibit 1

From Stockholm to Rio: Benchmark Events That Defined the International Agenda for the Environment and Sustainable Development

TWENTY FIVE YEARS AGO the United Nations Conference on the Human Environment was held in Stockholm, Sweden. Many of the key messages arising from that historic meeting are central to the concept of sustainable development and still resonate with us today. Recognizing linkages is a central theme: the interdependence of human beings and the natural environment; the ties between economic and social development and environmental protection; and the need for a global vision and common principles.

> *The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world . . .*
>
> Declaration of the United Nations Conference on the Human Environment, 1972

TEN YEARS AGO the United Nations World Commission on Environment and Development (often referred to as the Brundtland Commission, after its Chairperson) released its landmark report, *Our Common Future*. Building upon many of the ideas explored in Stockholm in 1972, the Commission outlined a global prescription for "sustainable development" that recognizes the connections among economic growth, human development and environmental protection. It calls for a fundamental shift in public policy orientation and values.

> *Humanity has the ability to make development sustainable — to ensure that it meets the needs of the present without compromising the ability of future generations to meet their needs. The concept of sustainable development does imply limits — not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. But technology and social organization can be managed and improved to make way for a new era of economic growth.*
>
> *Our Common Future*, World Commission on Environment and Development, 1987

FIVE YEARS AGO Rio de Janeiro was the site of the 1992 United Nations Conference on Environment and Development (UNCED), more commonly known as the Earth Summit. Over 30,000 people attended, including representatives from 178 nations and non-governmental organizations. Echoing many of the themes of the Stockholm Conference and *Our Common Future*, a major focus was the globalization of environmental problems and the need for a co-ordinated international response to ensure long-term economic progress and a healthy biosphere. The conference wrapped up with a meeting of 105 world leaders who gathered together to demonstrate their commitment to sustainable development.

Some of the initiatives emerging from Rio Earth Summit included the following:

- the Rio Declaration – a set of principles to guide future development;
- Agenda 21 – a comprehensive document regarded by many as the sustainable development "blueprint" for the 21st century;
- the Framework Convention on Climate Change;
- the Convention on Biological Diversity; and
- a statement of Guiding Principles on Forests.

Canada's strengths

27. Canada brings a broad range of assets to the pursuit of sustainable development. Some of these are natural assets. For example, Canada extends over almost 10 million square kilometres, and borders on three oceans. We are custodians of about nine percent of the world's renewable fresh water supply, 10 percent of its forests, and significant reserves of oil, gas, coal and other minerals.

28. But perhaps even more important is the talent, energy and resourcefulness of Canadians. Much of Canada's economic development and well-being has come from the application of ever more sophisticated technology, by an increasingly educated work force, to our rich base of renewable and non-renewable resources. Canada has achieved a level of human development that is the envy of much of the world.

A number of achievements

29. Over the last quarter-century, Canada has been a leader in international co-operation on environmental issues. For example, Canada played a major role in establishing the Montreal Protocol, an international regime to protect the earth's ozone layer. Another example is the Canada-United States Air Quality Accord on acid rain and other transboundary air pollution issues.

30. The recent *State of Canada's Environment — 1996* documents progress we have made in a number of areas toward a healthier environment. For example, compared with most other countries, Canada enjoys water of a relatively high quality. Key industries have significantly reduced their pollution levels. Air quality has improved and progress has been made in protecting natural areas and reducing waste.

Significant challenges remain

31. Significant challenges remain, however, including the management of new toxic chemicals, urban smog and groundwater contamination. Compared with other countries, per capita we are a large consumer of energy and other natural resources and a large generator of pollution and waste. Recent projections prepared for federal-provincial energy and environment ministers suggest that Canada will fall far short of meeting its target for reducing greenhouse gas emissions.

32. In short, we must work hard to reduce the burden of pollution, manage our natural resources, integrate environmental, social and economic decision making and meet our international commitments.

Canadians expect more to be done

33. Canadians are worried about the quality of the environment, and its impact on their health and the health and opportunities of their children. Recent public opinion research by Synergistics Consulting Limited and Environics Research Group Ltd., in their Environmental Monitor surveys, suggests that:

- **Canadians remain deeply concerned about the quality of the environment.** A majority of Canadians are "very concerned" about key issues such as toxic chemicals and air and water quality. This concern has remained constant over the past decade.

- **There is still much to do.** Canadians recognize that some progress has been made in the past 10 years in reducing pollution to safe levels, but that we still have a long way to go. On average,

Canada has achieved a level of human development that is the envy of much of the world.

Significant challenges remain in protecting the environment and fostering sustainable development.

Canadians feel that we are only one third of the way toward achieving the goal of a "safe" environment.

- **Canadians are questioning the government's capacity to make a difference.** A slim majority of Canadians agree that the federal government seems no longer capable of playing a major role in achieving a sustainable environment in Canada over the longer term.

34. As the Auditor General indicated in his November 1996 Report, a number of analysts have concluded that one of the most significant changes in recent years has been a loss of public confidence in governments. The failure of governments to deliver in key areas of importance to Canadians is cited by those analysts as a major cause of this loss of confidence. The environment is one of those key areas.

The federal government's role

35. The federal government has an important role to play in protecting the environment and fostering sustainable development. Its influence is felt in three ways:

The federal government has an important role to play.

- **As an employer, landlord and purchaser**, the federal government is the largest single enterprise in Canada. How it manages its day-to-day operations has significant implications for the environment and for sustainable development.

- **As a rule-maker and enforcer**, the federal government's policies have an important influence on decisions made by individual producers and consumers. In particular, the federal government shares responsibility for establishing the framework of laws and regulations that affect our use of the environment.

- **As a service and program provider**, the federal government contributes to our overall economic and social well-being. For example, it provides much of the scientific expertise needed to protect the environment and foster sustainable development. And it delivers key services like weather forecasts and food inspection.

The federal government's performance

36. Although progress has been made in a number of areas, it has not been uniform. Many environmental and sustainable development issues are, by their very nature, difficult to manage. They present governments with significant challenges. They are often scientifically complex, involve long time frames and do not fit neatly within a single department's or government's mandate or jurisdiction.

37. The global nature of environmental issues has also increased the complexity of problem solving. It is no longer enough to focus on environmental problems in our own backyard, although this remains important. As the ozone depletion problem demonstrates, all people share the same environment. We suffer the consequences of not only our own actions and inaction but also those of people elsewhere in the world.

38. Over the past decade, the Office of the Auditor General has become progressively more active in the environmental area and has done pioneering work in applying audit principles to the environment. Some 42 audits of issues with a significant environmental or sustainable development component have been undertaken. (These audits are listed in Appendix B.)

39. These audits provide valuable insights into the federal government's performance in managing individual environmental or sustainable development issues. Three key themes emerged from our review of them.

- **The implementation gap**. In many areas, the federal government's

performance falls short of its stated objectives. This gap reflects the failure to translate policy direction into effective action. It ranges from instances of lack of conformity with the Environmental Assessment and Review Process to the failure to meet targets for key programs.

- **Lack of co-ordination and integration**. Many of the most pressing issues facing government today cut across departmental mandates and political jurisdictions. Managing these so-called horizontal issues has proved to be a particular challenge for governments. Recognizing the broad sharing of responsibility for the environment and sustainable development, in his 1990 Report to Parliament the Auditor General asked: "Who's minding the store?" That question could as easily be asked today.

- **Inadequate performance review and information to Parliament**. Performance review is an important management tool, and reporting to Parliament is critical for accountability. The Auditor General has found weaknesses in both areas. Both senior management in departments and parliamentarians lack information on the benefits Canadians are deriving from the government's environmental programs. For example, the Auditor General indicated that reporting on the federal government's efforts to "green" its operations was neither complete nor objective.

The Mandate of the Commissioner of the Environment and Sustainable Development

The need to improve accountability

40. Discussion of the need for a position of this kind can be traced back at least as far as 1989 (see Exhibit 2). In that year, a coalition of environmental, conservation and Aboriginal groups proposed the appointment of an environmental auditor general (EAG) as one part of a comprehensive environmental strategy for Canada. The proposed EAG would report directly to Parliament, and would focus on whether the federal government was complying with environmental laws and regulations.

41. A common thread in subsequent discussion surrounding an EAG was the need for the federal government to improve its performance in protecting the environment and fostering sustainable development and to be more accountable for that performance. Parallels were drawn with the Auditor General's role in helping Parliament to hold the government accountable for the collection and spending of public funds.

There are weaknesses in the federal government's management of environmental and sustainable development issues.

42. A number of variants of the EAG concept were discussed by parliamentarians. Much of the debate centred on the need to avoid duplication of roles and responsibilities with other participants in the public policy process, such as environmental groups, Environment Canada and the Auditor General.

43. The federal government chose a package of initiatives aimed at enhancing public accountability and public involvement. Among these were the amendments to the *Auditor General Act* that provided for the creation of a Commissioner of the Environment and Sustainable Development (see Appendix A). The Commissioner assists the Auditor General in performing the duties set out in the Act that relate to the environment and sustainable development.

A mandate to assist parliamentarians

44. The amendments to the *Auditor General Act* respected the traditional lines

Exhibit 2

Commissioner of the Environment and Sustainable Development: Key Dates

Summer 1989	A coalition of environmental, conservation and Aboriginal groups submitted an environmental plan to the federal government (*Greenprint for Canada*). In it, they proposed the appointment of an independent Environmental Auditor General (EAG) to review federal activities for compliance with environmental statutes and regulations.
Fall 1990	The House of Commons Standing Committee on Environment discussed the merits of an EAG to monitor the progress of federal departments and agencies in their setting and attaining targets for greenhouse gas emissions.
December 1990	A Private Member's Bill to establish an EAG was presented to Parliament. The EAG would audit government operations to ensure that any activity, program or initiative was compatible with the protection and enhancement of the environment.
February 1992	The House of Commons Standing Committee on Public Accounts asked the Auditor General for his opinion on the need for an EAG. The Auditor General noted that there were differences of opinion about the nature of the role of an EAG, and who should perform it. Most definitions went beyond the current mandate and resources of the Office of the Auditor General.
Summer 1993	The Liberal Party pledged to appoint an independent EAG reporting directly to Parliament. The EAG would monitor and report annually to the public on how successfully federal programs and spending were supporting the move to sustainable development.
March 1994	The government requested the Standing Committee on Environment and Sustainable Development to examine the concept of an EAG who would ensure that government's activities were carried out in a sustainable manner.
May 1994	The Standing Committee recommended the establishment of a Commissioner of the Environment and Sustainable Development. The proposed Commissioner would be independent of government, and would have two main roles: reviewing how well government policies, programs and spending support Canada's move to sustainable development; and providing liaison, monitoring and encouragement to government, Parliament and the public to support that move.
October 1994	The government responded to the Committee report, proposing creation of a Commissioner of the Environment and Sustainable Development in the Office of the Auditor General and requiring ministers to prepare sustainable development strategies for their departments and to table them in Parliament.
June 1995	The government released *A Guide to Green Government* to assist departments in their preparation of sustainable development strategies.
December 1995	Amendments to the *Auditor General Act* establishing the position of Commissioner of the Environment and Sustainable Development received royal assent.
June 1996	The first Commissioner of the Environment and Sustainable Development was appointed.
November 1996	The Commissioner's Advisory Panel was established, with members drawn from a cross-section of Canada's environmental and sustainable development community.
March 1997	The Commissioner's first annual report to Parliament is submitted on behalf of the Auditor General.
December 1997	Sustainable development strategies of 24 federal departments and agencies due.

of ministerial accountability to Parliament. Ministers are responsible for policy choices. The role of the Commissioner of the Environment and Sustainable Development is to assist parliamentarians in their oversight of the federal government's efforts to protect the environment and to foster sustainable development.

45. More specifically, the Commissioner has responsibilities in four main areas:

- **Monitoring sustainable development strategies.** Twenty-four federal departments and agencies are required to prepare sustainable development strategies and to table them in the House of Commons by 15 December 1997 (see Appendix C). The Commissioner is responsible for monitoring the extent to which departments have implemented the action plans and met the objectives associated with their strategies.

- **Audits and special studies of environmental and sustainable development issues.** The environment and sustainable development are now formal considerations in the Auditor General's determination of which issues to review and report on to the House of Commons.

- **Petitions.** The Commissioner receives petitions on environmental matters that are the responsibility of federal departments and agencies, and monitors the government's responses to them.

- **Reporting.** The Commissioner reports annually to the House of Commons on these and other matters relating to the environment and sustainable development that he believes should be brought to the attention of the House.

Work Plan for the Commissioner's Office

Objectives

46. There are four objectives that will guide the work of the Commissioner's office over the next two years:

- To provide objective, independent analysis and recommendations to members of Parliament to help them examine the government's environmental and sustainable development activities and hold it to account.

- To work with federal departments and agencies to help strengthen their capacity to manage environmental and sustainable development issues by promoting the adoption of best management practices.

- To address both environmental protection and sustainable development, by emphasizing better decision making within the federal government. In the shorter term, particular attention will be paid to the federal government's efforts to protect the environment.

- To continue to focus on key weaknesses in the federal government's management of sustainable development issues identified in previous work by the Office of the Auditor General, and the success and failure of departments in dealing with them. These weaknesses include: the implementation gap; a lack of co-ordination and integration among departments and across jurisdictions; and inadequate performance review and information to Parliament.

The work of the Commissioner will strengthen the government's performance by enhancing accountability.

Work plan

47. The Commissioner's work plan has four main components; the key elements of the work plan are summarized in Exhibit 3.

Review of sustainable development strategies

48. Departmental sustainable development strategies are critical for

Exhibit 3

Environment and Sustainable Development Issues: The Commissioner's Work Plan

Task	In 1997–98	In 1998–99
Departmental sustainable development strategies	Develop audit criteria Develop and implement a sustainable development strategy for the Office of the Auditor General	Audit 12 departmental strategies
Integrating the fourth "E" across the Office of the Auditor General	Develop guidelines for incorporating environmental considerations in all the audit work of the Office Complete audits of : • Control of Transboundary Movements of Hazardous Waste • Energy Efficiency • Atlantic Groundfish/Sustainable Fishery • Ozone Depletion • Parks Capital Assets • Salmon Fisheries Habitat • Environmental Assessment • Prairie Farm Rehabilitation Administration	Complete audits of: • Environment Performance Reporting • Environment Compliance and Enforcement • Climate Change • Ensuring a Sustainable Salmon Fishery • Sustainable Fisheries — East Coast
Special studies	Complete studies of: • Canada's International Commitments • Environmental Performance in the Public and Private Sectors • Performance Measurement • Accounting for Sustainable Development Establish studies program for 1998–99	1998–99 studies program to be determined in 1997–98
Petitions	Monitor on behalf of the Auditor General	Monitor on behalf of the Auditor General

advancing the federal government's sustainable development agenda, and for measuring progress against it. Over the next year, in consultation with departments and agencies, the specific criteria for reviewing departmental strategies will be developed.

49. The framework set out in *A Guide to Green Government* will be used as the starting point. The *Guide* indicates that each strategy should be:

- **comprehensive**, dealing both with departmental policies and programs and with the management of the department's internal operations;
- **results-oriented**, identifying in sustainable development terms the main results the department will achieve, and how it will measure performance toward them; and
- **developed in consultation** with the department's clients, partners and other stakeholders.

50. The *Guide* suggests an approach for departments to use in preparing their strategies. The main elements are set out in Exhibit 4. The government has also released other documents dealing with more specific elements of departmental strategies: *Directions on Greening Government Operations* and the *Environmental Management System (EMS) Self-Assessment Guide*. These documents will form part of the framework for assessing strategies.

51. Strategies will also need to address the management of environmental and sustainable development issues that cut across departmental mandates and political jurisdictions. A number of mechanisms have been put in place to share information and experience among departments on the preparation of sustainable development strategies. We will determine how well they work.

Departmental strategies are critical for advancing the sustainable development agenda.

52. In December 1996, deputy ministers and heads of agencies were asked to complete a brief questionnaire on the status of their preparation of sustainable development strategies. Most of the respondents are in the early stages

Exhibit 4

Preparing a Sustainable Development Strategy

i. **Departmental Profile**
Identification of what the department does and how it does it.

ii. **Issue Scan**
Assessment of the department's activities in terms of their impact on sustainable development.

iii. **Consultations**
Seeking the perspective of clients, partners and other stakeholders on departmental priorities for sustainable development and how to achieve them.

iv. **Goals, Objectives and Targets**
Identification of the department's goals and objectives for sustainable development, including benchmarks it will use for measuring performance.

v. **Action Plan**
How the department will translate its sustainable development targets into measurable results, including specific policy, program, legislative, regulatory and operational changes.

vi. **Measurement, Analysis and Reporting of Performance**
Mechanisms the department is establishing to monitor and improve performance.

Source: Government of Canada, *A Guide to Green Government*, 1995

of preparing their strategies, although some departments have already conducted internal and external consultations. Three or four departments are sufficiently advanced that they plan to table their strategies well before the December 1997 deadline.

53. In responding to the questionnaire, departments cited performance measurement, issues that cut across departmental mandates, and awareness/understanding of requirements within the department as the three main difficulties in preparing strategies.

Environment is now the fourth "E" for the Office of the Auditor General.

Integrating the fourth "E" into the work of the Office

54. The principal activity of the Office of the Auditor General is legislative auditing, which includes auditing and reporting on the federal government's financial statements; its compliance with federal statutes and regulations; its safeguarding of public assets; its collection of revenue; and its implementation of its policies and programs. The latter category is called "value-for-money" auditing.

55. Traditionally these audits have been conducted in terms of *economy, efficiency and effectiveness* — known as the three "E"s. As a result of the amendments to the *Auditor General Act*, the "environment" formally joins the three "E"s that the Auditor General takes into consideration in deciding what to report to the House of Commons. An explanation of the four "E"s is contained in Exhibit 5.

Exhibit 5

The Four "E"s

In conducting an audit, the auditor asks questions such as:

- Has money been spent with due regard to ***economy***?
- Has money been spent with due regard to ***efficiency***?
- Are procedures in place to measure and report on the ***effectiveness*** of programs?
- Has money been spent with due regard to the ***environmental*** effects of those expenditures?

56. Three priorities have been established for the review of environmental and sustainable development issues. In order of importance, they are:

- **Improved decision making**. Environmental problems and unsustainable development are ultimately failures of decision making. A number of federal government activities affect how decisions are made, within the federal government and across society. Over the next two years, three such activities will be audited: environmental assessment, environmental reporting and environmental compliance and enforcement.

- **Key issues of concern to Canadians**. A number of key environmental and sustainable development issues will also be reviewed. Examples include the transboundary movement of hazardous waste, ozone depletion, climate change and sustainability of fisheries. For these key issues, questions of accountability and best practices are particularly important.

- **Program issues**. Finally, other, more specific program issues with an important environmental or sustainable development dimension will be audited. Examples include energy efficiency and the capital assets in our national parks.

Studies of special interest to Parliament

57. Another part of the Commissioner's work involves exploring environmental and sustainable development issues of significant interest to Parliament. A series of studies on "cutting edge" issues will be conducted, and the results will be presented in future annual reports to Parliament.

58. The purpose behind these studies is three-fold:

- to help build the capacity of federal departments to prepare and implement strategies for sustainable development;
- to review key elements of government performance in protecting the environment and fostering sustainable development that may not lend themselves to a strict audit framework; and
- to develop criteria for audits and for examining sustainable development strategies.

59. In the coming year, special studies will be conducted on the following topics:

- **Meeting our international obligations**. Canada is a signatory to a wide range of international agreements to safeguard and improve the environment. This study will provide an inventory of those agreements, and an initial assessment and overview of the extent to which Canada is meeting its commitments under them.
- **Public and private sector performance**. A 1995 audit reported that the private sector organizations interviewed were generally further advanced than federal departments and agencies in implementing comprehensive environmental management systems. Nevertheless, very few of the system elements were fully developed in either the public or private sector. Further studies on the differences between public and private sector performance will be conducted to identify best practices and assess their transferability between the two sectors.
- **Performance measurement**. As part of preparing their sustainable development strategies, departments are required to identify goals and objectives for sustainable development, including benchmarks for measuring performance. This study is intended to advance the state of the art in applying performance measurement to the management of environmental and sustainable development issues.
- **Accounting for sustainable development**. Wise decisions affecting the environment and sustainable development require an understanding of the relative costs and benefits of action and inaction. In some areas, these costs and benefits can be measured and taken into account as decisions are made. In others, the ability to measure is currently quite limited. An assessment of the current state of knowledge will be prepared to identify best practices.

Petitions

60. Openness and transparency are two of the key elements of a sustainable development approach to public policy. The Commissioner, on behalf of the Auditor General, is charged with co-ordinating the receipt of petitions from Canadians, monitoring responses by the appropriate minister and reporting to the House of Commons on the subject matter and status of petitions.

Openness and transparency are key elements of sustainable development.

Exhibit 6

Summary of the Petition Process

- A resident of Canada who has a concern about an environmental matter that is the responsibility of a federal department may send a petition in writing to the Auditor General.
- The Commissioner, on behalf of the Auditor General, makes a record of the petition and forwards it within 15 days to the appropriate minister for response.
- The minister sends an acknowledgement to the petitioner and the Commissioner within 15 days.
- The minister has 120 days from the date of receipt from the Commissioner to respond.
- If required, the minister may notify the petitioner and the Commissioner within the 120 days that a response will be delayed.

61. Exhibit 6 sets out the steps in the petition process. To date, one petition has been received concerning the environmental assessment of a project sponsored by the Atlantic Canada Opportunities Agency. The petition was forwarded to the Minister responsible for the Atlantic Canada Opportunities Agency (ACOA). The Minister has formally responded to the petition, and a copy has been received by the Commissioner.

Making a Difference

62. Like the Auditor General, I took this job because I want to make a difference. At the end of my term as Commissioner, I want to be able to point to concrete achievements to which we have contributed — that the environment is healthier, and that we are closer to making sustainable development a reality. The priorities and work program set out in this first report are means to that end.

APPENDIX A
EXCERPTS FROM THE *AUDITOR GENERAL ACT*

An Act respecting the Office of the Auditor General of Canada and sustainable development monitoring and reporting

INTERPRETATION

Definitions

2. In this Act,

"appropriate Minister"

"appropriate Minister" has the meaning assigned by section 2 of the *Financial Administration Act*;

"category I department"

"category I department" means

(a) any department named in Schedule I to the *Financial Administration Act*,

(b) any department in respect of which a direction has been made under subsection 24(3), and

(c) any department, as defined in the *Financial Administration Act*, set out in the schedule;

"Commissioner"

"Commissioner" means the Commissioner of the Environment and Sustainable Development appointed under subsection 15.1(1);

"sustainable development"

"sustainable development" means development that meets the needs of the present without compromising the ability of future generations to meet their own needs;

"sustainable development strategy"

"sustainable development strategy", with respect to a category I department, means the department's objectives, and plans of action, to further sustainable development.

DUTIES

Examination

5. The Auditor General is the auditor of the accounts of Canada, including those relating to the Consolidated Revenue Fund and as such shall make such examinations and inquiries as he considers necessary to enable him to report as required by this Act.

Idem

6. The Auditor General shall examine the several financial statements required by section 64 of the *Financial Administration Act* to be included in the Public Accounts, and any other statement that the President of the Treasury Board or the Minister of Finance may present for audit and shall express his opinion as to whether they present fairly information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have.

Annual and additional reports to the House of Commons

7. (1) The Auditor General shall report annually to the House of Commons and may make, in addition to any special report made under subsection 8(1) or 19(2) and the Commissioner's report under subsection 23(2), not more than three additional reports in any year to the House of Commons

(a) on the work of his office; and,

(b) on whether, in carrying on the work of his office, he received all the information and explanations he required.

Idem

(2) Each report of the Auditor General under subsection (1) shall call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, including any cases in which he has observed that

(a) accounts have not been faithfully and properly maintained or public money has not been fully accounted for or paid, where so required by law, into the Consolidated Revenue Fund;

(b) essential records have not been maintained or the rules and procedures applied have been insufficient to safeguard and control public property, to secure an effective check on the assessment, collection and proper allocation of the revenue and to ensure that expenditures have been made only as authorized;

(c) money has been expended other than for purposes for which it was appropriated by Parliament;

(d) money has been expended without due regard to economy or efficiency;

(e) satisfactory procedures have not been established to measure and report the effectiveness of programs, where such procedures could appropriately and reasonably be implemented; or

(f) money has been expended without due regard to the environmental effects of those expenditures in the context of sustainable development.

STAFF OF THE AUDITOR GENERAL

Appointment of Commissioner

15.1 (1) The Auditor General shall, in accordance with the *Public Service Employment Act*, appoint a senior officer to be called the Commissioner of the Environment and Sustainable Development who shall report directly to the Auditor General.

Commissioner's duties

(2) The Commissioner shall assist the Auditor General in performing the duties of the Auditor General set out in this Act that relate to the environment and sustainable development.

SUSTAINABLE DEVELOPMENT

Purpose

21.1 The purpose of the Commissioner is to provide sustainable development monitoring and reporting on the progress of category I departments towards sustainable development, which is a continually evolving concept based on the integration of social, economic and environmental concerns, and which may be achieved by, among other things,

(a) the integration of the environment and the economy;

(b) protecting the health of Canadians;

(c) protecting ecosystems;

(d) meeting international obligations;

(e) promoting equity;

(f) an integrated approach to planning and making decisions that takes into account the environmental and natural resource costs of different economic options and the economic costs of different environmental and natural resource options;

(g) preventing pollution; and

(h) respect for nature and the needs of future generations.

Petitions received

22. (1) Where the Auditor General receives a petition in writing from a resident of Canada about an environmental matter in the context of sustainable development that is the responsibility of a category I department, the Auditor General shall make a record of the petition and forward the petition within fifteen days after the day on which it is received to the appropriate Minister for the department.

Acknowledgement to be sent

(2) Within fifteen days after the day on which the Minister receives the petition from the Auditor General, the Minister shall send to the person who made the petition an acknowledgement of receipt of the petition and shall send a copy of the acknowledgement to the Auditor General.

Minister to respond

(3) The Minister shall consider the petition and send to the person who made it a reply that responds to it, and shall send a copy of the reply to the Auditor General, within

(a) one hundred and twenty days after the day on which the Minister receives the petition from the Auditor General; or

(b) any longer time, where the Minister personally, within those one hundred and twenty days, notifies the person who made the petition that it is not possible to reply within those one hundred and twenty days and sends a copy of that notification to the Auditor General.

Multiple petitioners

(4) Where the petition is from more that one person, it is sufficient for the Minister to send the acknowledgement and reply, and the notification, if any, to one or more of the petitioners rather than to all of them.

Duty to monitor

23. (1) The Commissioner shall make any examinations and inquiries that the Commissioner considers necessary in order to monitor

(a) the extent to which category I departments have met the objectives, and implemented the plans, set out in their sustainable development strategies laid before the House of Commons under section 24; and

(b) the replies by Ministers required by subsection 22(3).

Commissioner's report

(2) The Commissioner shall, on behalf of the Auditor General, report annually to the House of Commons concerning anything that the Commissioner considers should be brought to the attention of that House in relation to environmental and other aspects of sustainable development, including

(a) the extent to which category I departments have met the objectives, and implemented the plans, set out in their sustainable development strategies laid before that House under section 24;

(b) the number of petitions recorded as required by subsection 22(1), the subject-matter of the petitions and their status; and

(c) the exercising of the authority of the Governor in Council under any of subsections 24(3) to (5).

Submission and tabling of report

(3) The report required by subsection (2) shall be submitted to the Speaker of the House of Commons and shall be laid before that House by the Speaker on any of the next fifteen days on which that House is sitting after the Speaker receives it.

Strategies to be tabled

24. (1) The appropriate Minister for each category I department shall cause the department to prepare a sustainable development strategy for the department and shall cause the strategy to be laid before the House of Commons

(a) within two years after this subsection comes into force; or

(b) in the case of a department that becomes a category I department on a day after this subsection comes into force, before the earlier of the second anniversary of that day and a day fixed by the Governor in Council pursuant to subsection (4).

Updated strategies to be tabled

(2) The appropriate Minister for the category I department shall cause the department's sustainable development strategy to be updated at least every three years and shall cause each updated strategy to be laid before the House of Commons on any of the next fifteen days on which that House is sitting after the strategy is updated.

Governor in Council direction

(3) The Governor in Council may, on that recommendation of the appropriate Minister for a department not named in Schedule I to the *Financial Administration Act*, direct that the requirements of subsections (1) and (2) apply in respect of the department.

Date fixed by Governor in Council

(4) On the recommendation of the appropriate Minister for a department that becomes a category I department after this subsection comes into force, the Governor in Council may, for the purpose of subsection (1), fix the day before which the sustainable development strategy of the department shall be laid before the House of Commons.

Regulations

(5) The Governor in Council may, on the recommendation of the Minister of the Environment, make regulations prescribing the form in which sustainable development strategies are to be prepared and the information required to be contained in them.

APPENDIX B
Previous Environmental and Sustainable Development Work by the Office of the Auditor General, 1987 to 1996

Reference	Title	Departments/Agencies
November 1996 Chapter 22	Federal Contaminated Sites – Management Information on Environmental Costs and Liabilities	Treasury Board Secretariat, Environment, National Defence, Transport, Indian Affairs and Northern Development
November 1996 Chapter 26	Canada Infrastructure Works Program – Lessons Learned	Treasury Board Secretariat, Industry, Indian Affairs and Northern Development, Western Economic Diversification, Federal Office of Regional Development – Quebec, Atlantic Canada Opportunities Agency
November 1996 Chapter 31	Parks Canada: Preserving Canada's National Heritage	Heritage
November 1996 Chapter 39	Other Audit Observations – AECL	Atomic Energy of Canada Limited
May 1996 Chapter 2	The Implementation of Federal Environmental Stewardship	Environment, all Departments
May 1996 Chapter 9	Animal and Plant Health: Inspection and Regulation	Agriculture and Agri–Food
October 1995 Chapter 11	Environmental Management Systems: A Principle–Based Approach	Treasury Board Secretariat, Environment
October 1995 Chapter 15	Northumberland Strait Crossing Project	Public Works and Government Services
May 1995 Chapter 2	Managing the Legacy of Hazardous Waste	Environment
May 1995 Chapter 3	Federal Radioactive Waste Management	Natural Resources, Atomic Energy Control Board
1994 Chapter 9	Science and Technology – Overall Management of Federal Science and Technology Activities	Some Departments
1994 Chapter 10	Science and Technology – Management of Departmental Science and Technology Activities	Environment, Fisheries and Oceans, Industry, National Research Council, Natural Resources
1994 Chapter 11	Science and Technology – The Management of Scientific Personnel in Federal Research Establishments	Environment, Fisheries and Oceans, Industry, Natural Resources, Treasury Board Secretariat
1994 Chapter 12	Aspects of Federal Real Property Management	National Defence, Public Works, Correctional Services Canada, Foreign Affairs and International Trade
1994 Chapter 15	Atomic Energy Control Board – Canada's Nuclear Regulator	Atomic Energy Control Board
1994 Chapter 19	Environmental Partners Fund	Environment
1994 Chapter 20	Environment Canada – Ice Services	Environment
1994 Chapter 27	National Defence – Infrastructure Management	National Defence
1994 Chapter 34	Management and Operation of Crown–owned Office Buildings	Public Works
1993 Chapter 13	Agri–Food Policy Review	Agriculture
1993 Chapter 14	The Control and Clean–up of Freshwater Pollution	Environment

APPENDIX B (cont'd)

Reference	Title	Departments/Agencies
1993 Chapter 15	Northern Cod Adjustment and Recovery Program	Fisheries and Oceans
1993 Chapter 16	Department of Forestry	Forestry
1993 Chapter 26	Pulp and Paper Regulations	Environment
1992 Chapter 12	Participation In the World Bank Group and the IMF	Finance
1992 Chapter 14	Energy Megaprojects	Energy, Mines and Resources
1992 Chapter 24	Emergency Preparedness in the Federal Government	Emergency Preparedness, Transport, Environment, Employment and Immigration, Communications, National Defence, Health and Welfare, Energy Mines and Resources, Industry Science and Technology
1991 Chapter 7	Vehicle Fleet Management	Supply and Services, National Defence, Royal Canadian Mounted Police, Transport, Agriculture, Public Works
1991 Chapter 11	Conservation and Protection	Environment
1991 Chapter 13	Central and Arctic Operations	Fisheries and Oceans
1991 Chapter 15	Customs and Excise (Hazardous Materials)	National Revenue
1990 Chapter 18	Department of the Environment	Environment
1990 Chapter 19	Northern Affairs Program	Indian Affairs and Northern Development
1990 Chapter 26	RCMP – Federal Law Enforcement	Royal Canadian Mounted Police
1989 Chapter 11	Canadian Parks Service	Environment
1989 Chapter 17	Federal Regulatory Review Process	Environment, Transport, Health and Welfare, Labour
1989 Chapter 22	Canadian Coast Guard	Transport
1988 Chapter 7	Canadian Forestry Service	Agriculture
1988 Chapter 8	Food Production and Inspection Branch	Agriculture
1988 Chapter 13	Atlantic Operations, Inspection and Corporate Functions	Fisheries and Oceans
1987 Chapter 15	Special Audits: Emergency Preparedness	Emergency Preparedness, All Departments
1987 Chapter 15	Major Capital Projects: Lake Louise	Environment

APPENDIX C
Departments and Agencies Required to Prepare Sustainable Development Strategies

Department of Agriculture and Agri–Food

Atlantic Canada Opportunities Agency

Department of Canadian Heritage

Canadian International Development Agency

Department of Citizenship and Immigration

Department of the Environment

Federal Office of Regional Development (Quebec)

Department of Finance

Department of Fisheries and Oceans

Department of Foreign Affairs and International Trade

Department of Health

Department of Human Resources Development

Department of Indian Affairs and Northern Development

Department of Industry

Department of Justice

Department of National Defence

Department of National Revenue

Department of Natural Resources

Department of Public Works and Government Services

Department of Solicitor General

Department of Transport

Treasury Board

Department of Veterans Affairs

Department of Western Economic Diversification

APPENDIX D
Advisors to the Commissioner of Environment and Sustainable Development
Membership of the Panel of Environmental Advisors

Randy C. Billing
Ernst & Young Environmental Services Inc., Toronto

Jean-Pierre Gauthier
City of Montreal

Yves Gauthier
KPMG, Montreal

Chris Henderson
The Delphi Group, Ottawa

Tony Hodge
Victoria, B.C.

Susan Holtz
Ferguson's Cove, N.S.

Claude-André Lachance
Dow Chemical Canada Inc., Ottawa

Ken Ogilvie
Pollution Probe, Toronto

Robert Page
University of Calgary

Richard Paton
The Canadian Chemical Producers' Association, Ottawa

Elizabeth Rose
Nortel, Mississauga

Glen Toner
Carleton University, Ottawa

Stephen Thompson
University of New Brunswick, Fredericton

Peter Victor
York University, North York

ANNEXE D

Conseillers du commissaire à l'environnement et au développement durable
Membres du Groupe des conseillers en environnement

Randy C. Billing
Ernst & Young Environmental Services Inc., Toronto

Jean–Pierre Gauthier
Ville de Montréal

Yves Gauthier
KPMG, Montréal

Chris Henderson
The Delphi Group, Ottawa

Tony Hodge
Victoria (C.–B.)

Susan Holtz
Ferguson's Cove (N.–É.)

Claude–André Lachance
Dow Chemical Canada Inc., Ottawa

Ken Ogilvie
Pollution Probe, Toronto

Robert Page
Université de Calgary

Richard Paton
Association canadienne des fabricants de produits chimiques, Ottawa

Elizabeth Rose
Nortel, Mississauga

Glen Toner
Université Carleton, Ottawa

Stephen Thompson
Université du Nouveau–Brunswick, Fredericton

Peter Victor
Université York, North York

ANNEXE C
Liste des ministères et des organismes qui doivent préparer des stratégies de développement durable

Agence canadienne de développement international

Agence de promotion économique du Canada atlantique

Bureau fédéral de développement régional (Québec)

Conseil du Trésor

Ministère de la Citoyenneté et de l'Immigration

Ministère de la Défense nationale

Ministère de la Diversification de l'économie de l'Ouest canadien

Ministère de l'Agriculture et de l'Agroalimentaire

Ministère de la Justice

Ministère de la Santé

Ministère de l'Environnement

Ministère de l'Industrie

Ministère des Affaires étrangères et du Commerce international

Ministère des Affaires indiennes et du Nord canadien

Ministère des Anciens combattants

Ministère des Finances

Ministère des Ressources naturelles

Ministère des Pêches et des Océans

Ministère des Transports

Ministère des Travaux publics et des Services gouvernementaux

Ministère du Développement des ressources humaines

Ministère du Patrimoine canadien

Ministère du Revenu national

Ministère du Solliciteur général

ANNEXE B (suite)

Référence	Titre	Ministères / Organismes
1993 Chapitre 14	Réduction de la pollution et assainissement des eaux douces	Environnement
1993 Chapitre 15	Le Programme d'adaptation et de redressement de la pêche de la morue du Nord	Pêches et Océans
1993 Chapitre 16	Le ministère des Forêts	Forêts
1993 Chapitre 26	Les règlements sur les pâtes et papiers	Environnement
1992 Chapitre 12	Participation au Groupe de la Banque mondiale et au FMI	Finances
1992 Chapitre 14	Les mégaprojets énergétiques	Énergie, Mines et Ressources
1992 Chapitre 24	La protection civile au gouvernement fédéral	Protection civile, Transports, Environnement, Emploi et Immigration, Communications, Défense nationale, Santé nationale et Bien–être social, Énergie, Mines et Ressources, Industrie, Sciences et Technologie
1991 Chapitre 7	La gestion des parcs automobiles	Approvisionnements et Services, Défense nationale, Gendarmerie royale du Canada, Transports, Agriculture, Travaux publics
1991 Chapitre 11	Conservation et Protection	Environnement
1991 Chapitre 13	Activités de la région du Centre et de l'Arctique	Pêches et Océans
1991 Chapitre 15	Douanes et Accise (Matières dangereuses)	Revenu national
1990 Chapitre 18	Ministère de l'Environnement	Environnement
1990 Chapitre 19	Le Programme des affaires du Nord	Affaires indiennes et du Nord canadien
1990 Chapitre 26	GRC — Application des lois fédérales	Gendarmerie royale du Canada
1989 Chapitre 11	Le Service canadien des parcs	Environnement
1989 Chapitre 17	Le processus d'examen des projets de réglementation fédérale	Environnement, Transports, Santé nationale et Bien–être social, Travail
1989 Chapitre 22	Garde côtière canadienne	Transports
1988 Chapitre 7	Service canadien des forêts	Agriculture
1988 Chapitre 8	Direction générale de la production et de l'inspection des aliments	Agriculture
1988 Chapitre 13	Opérations de pêches dans l'Atlantique, Inspection et Services intégrés	Pêches et Océans
1987 Chapitre 15	Vérifications spéciales : La protection civile	Protection civile, tous les ministères
1987 Chapitre 15	Les grands projets d'immobilisations : Lac Louise	Environnement

ANNEXE B
Travaux antérieurs du Bureau du vérificateur général sur l'environnement et le développement durable 1987 à 1996

Référence	Titre	Ministères / Organismes
Novembre 1996 Chapitre 22	Lieux contaminés fédéraux — L'information de gestion sur les coûts et les passifs environnementaux	Secrétariat du Conseil du Trésor, Environnement, Défense nationale, Transports, Affaires indiennes et du Nord canadien
Novembre 1996 Chapitre 26	Le programme Travaux d'infrastructure Canada — Les leçons apprises	Secrétariat du Conseil du Trésor, Industrie, Affaires indiennes et du Nord canadien, Diversification de l'économie de l'Ouest, Bureau fédéral de développement régional (Québec), Agence de promotion économique du Canada atlantique
Novembre 1996 Chapitre 31	Parcs Canada : La protection du patrimoine naturel du Canada	Patrimoine canadien
Novembre 1996 Chapitre 39	Autres observations de vérification — EACL	Énergie atomique du Canada limitée
Mai 1996 Chapitre 2	La mise en oeuvre de la gérance environnementale au gouvernement fédéral	Environnement, tous les ministères
Mai 1996 Chapitre 9	La protection des végétaux et la santé des animaux : inspection et réglementation	Agriculture et Agroalimentaire
Octobre 1995 Chapitre 11	Les systèmes de gestion de l'environnement : Une approche fondée sur des principes	Secrétariat du Conseil du Trésor, Environnement
Octobre 1995 Chapitre 15	Le projet de raccordement dans le détroit de Northumberland	Travaux publics et Services gouvernementaux
Mai 1995 Chapitre 2	Les déchets dangereux — La gestion d'un lourd héritage	Environnement
Mai 1995 Chapitre 3	La gestion des déchets radioactifs par le gouvernement fédéral	Ressources naturelles, Commission de contrôle de l'énergie atomique
1994 Chapitre 9	Sciences et technologie — La gestion globale des activités fédérales dans le domaine des sciences et de la technologie	Certains ministères
1994 Chapitre 10	Sciences et technologie — La gestion des activités scientifiques et technologiques dans les ministères et organismes	Environnement, Pêches et Océans, Industrie, Conseil national de recherches, Ressources naturelles
1994 Chapitre 11	Sciences et technologie — La gestion du personnel scientifique dans certains établissements de recherche fédéraux	Environnement, Pêches et Océans, Industrie, Ressources naturelles, Secrétariat du Conseil du Trésor
1994 Chapitre 12	Aperçu de la gestion des biens immobiliers fédéraux	Défense nationale, Travaux publics, Service correctionnel Canada, Affaires étrangères et Commerce international
1994 Chapitre 15	La Commission de contrôle de l'énergie atomique — Organisme canadien de réglementation nucléaire	Commission de contrôle de l'énergie atomique
1994 Chapitre 19	Les partenaires de l'environnement	Environnement
1994 Chapitre 20	Environnement Canada — Service des glaces	Environnement
1994 Chapitre 27	Défense nationale— Gestion de l'infrastructure	Défense nationale
1994 Chapitre 34	Gestion et exploitation des immeubles à bureaux appartenant à l'État	Travaux publics
1993 Chapitre 13	Examen de la politique agro–alimentaire	Agriculture

Dépôt de la stratégie de développement

24. (1) Le ministre compétent de chaque ministère de catégorie I dépose devant la Chambre des communes la stratégie de développement durable de celui-ci dans un délai de deux ans à compter de l'entrée en vigueur du présent paragraphe. Toutefois, dans le cas du ministère qui devient un ministère de catégorie I après l'entrée en vigueur du présent paragraphe, la stratégie doit être déposée avant soit le second anniversaire de la date où il l'est devenu, soit, si elle est antérieure à cet anniversaire, la date fixée par le gouverneur en conseil en application du paragraphe (4).

Révision de la stratégie et dépôt

(2) Le ministre compétent fait réviser au moins tous les trois ans la stratégie de développement durable du ministère de catégorie I en cause et fait déposer la stratégie révisée devant la Chambre des communes dans les quinze premiers jours de séance de celle-ci suivant la révision.

Assujettissement

(3) Sur recommandation du ministre compétent d'un ministère qui n'est pas mentionné à l'annexe I de la *Loi sur la gestion des finances publiques*, le gouverneur en conseil peut assujettir, par une directive à cet effet, le ministère aux obligations prévues aux paragraphes (1) et (2).

Date fixée par le gouverneur en conseil

(4) Pour l'application du paragraphe (1), le gouverneur en conseil peut, sur recommandation du ministre compétent, fixer la date avant laquelle doit être déposée devant la Chambre des communes la stratégie de développement durable du ministère qui devient un ministère de catégorie I après l'entrée en vigueur du présent paragraphe.

Règlements

(5) Le gouverneur en conseil peut par règlement, sur recommandation du ministre de l'Environnement, prescrire la forme et le contenu de la stratégie de développement durable.

g) la prévention de la pollution;

h) le respect de la nature et des besoins des générations à venir.

Pétition

22. (1) S'il reçoit d'une personne résidant au Canada une pétition portant sur une question environnementale relative au développement durable et relevant de la compétence d'un ministère de catégorie I, le vérificateur général ouvre un dossier et transmet la pétition, dans les quinze jours suivant sa réception, au ministre compétent du ministère concerné.

Accusé de réception

(2) Dans les quinze jours suivant celui où il reçoit la pétition, le ministre en accuse réception et transmet copie de l'accusé de réception au vérificateur général.

Réponse du ministre

(3) Dans les cent vingt jours suivant celui où il reçoit la pétition, le ministre fait parvenir au pétitionnaire sa réponse et en transmet copie au vérificateur général. Il peut toutefois, dans ce délai, prolonger celui-ci en avisant personnellement le pétitionnaire, avec copie de l'avis au vérificateur général, qu'il lui est impossible de s'y conformer.

Plusieurs signataires

(4) S'il y a plusieurs signataires, il suffit au ministre de transmettre l'accusé de réception, l'avis, le cas échéant, et sa réponse à l'un d'entre eux.

Contrôle

23. (1) Le commissaire effectue les examens et enquêtes qu'il juge nécessaires pour :

a) contrôler la mesure dans laquelle chaque ministère de catégorie I a réalisé les objectifs prévus par sa stratégie de développement durable, une fois celle-ci déposée conformément à l'article 24, et mis en oeuvre les plans d'action de celle-ci;

b) assurer le suivi des réponses transmises par les ministres en application du paragraphe 22(3).

Rapport du commissaire

(2) Le commissaire établit au nom du vérificateur général et à l'intention de la Chambre des communes un rapport annuel sur toute question environnementale ou autre relative au développement durable qui, à son avis, doit être portée à la connaissance de la chambre, notamment :

a) la mesure dans laquelle chaque ministère de catégorie I a réalisé les objectifs prévus par sa stratégie de développement durable, une fois celle-ci déposée conformément à l'article 24, et mis en oeuvre les plans d'action de celle-ci;

b) le nombre de pétitions reçues aux termes du paragraphe 22(1), leur objet et l'état du dossier;

c) les cas d'exercice des pouvoirs conférés au gouverneur en conseil par les paragraphes 24(3) à (5).

Dépôt du rapport

(3) Le rapport est présenté au président de la Chambre des communes, puis déposé devant la chambre dans les quinze premiers jours de séance de celle-ci suivant la réception du rapport.

Idem

(2) Dans le rapport mentionné au paragraphe (1), le vérificateur général signale tout sujet qui, à son avis, est important et doit être porté à l'attention de la Chambre des communes, notamment les cas où il a constaté que :

a) les comptes n'ont pas été tenus d'une manière fidèle et régulière ou des deniers publics n'ont pas fait l'objet d'un compte rendu complet ou n'ont pas été versés au Trésor lorsque cela est légalement requis;

b) les registres essentiels n'ont pas été tenus ou les règles et procédures utilisées ont été insuffisantes pour sauvegarder et contrôler les biens publics, assurer un contrôle efficace des cotisations, du recouvrement et de la répartition régulière du revenu et assurer que les dépenses effectuées ont été autorisées;

c) des sommes d'argent ont été dépensées à d'autres fins que celles auxquelles le Parlement les avait affectées;

d) des sommes d'argent ont été dépensées sans égard à l'économie ou à l'efficience;

e) des procédures satisfaisantes n'ont pas été établies pour mesurer et faire rapport sur l'efficacité des programmes dans les cas où elles peuvent convenablement et raisonnablement être mises en oeuvre;

f) des sommes d'argent ont été dépensées sans égard à l'effet de ces dépenses sur l'environnement dans le contexte du développement durable.

PERSONNEL DU BUREAU DU VÉRIFICATEUR GÉNÉRAL

Nomination du commissaire

15.1 (1) Le vérificateur général nomme, conformément à la *Loi sur l'emploi dans la fonction publique*, un cadre supérieur relevant directement du vérificateur général et appelé commissaire à l'environnement et au développement durable.

Fonctions

(2) Le commissaire aide le vérificateur général à remplir ses fonctions en matière d'environnement et de développement durable. 1995, ch. 43, art. 4.

DÉVELOPPEMENT DURABLE

Mission

21.1 Le commissaire a pour mission d'assurer le contrôle des progrès accomplis par les ministères de catégorie I dans la voie du développement durable, concept en évolution constante reposant sur l'intégration de questions d'ordre social, économique et environnemental, et tributaire, notamment, de la réalisation des objectifs suivants :

a) l'intégration de l'environnement et de l'économie;

b) la protection de la santé des Canadiens;

c) la protection des écosystèmes;

d) le respect des obligations internationales du Canada;

e) la promotion de l'équité;

f) une approche intégrée pour la planification et la prise de décisions, grâce à l'évaluation des solutions économiques en fonction de leurs effets sur l'environnement et les ressources naturelles, et l'évaluation des solutions écologiques en fonction de leurs effets sur l'économie;

ANNEXE A
EXTRAITS DE LA *LOI SUR LE VÉRIFICATEUR GÉNÉRAL*

Loi concernant le bureau du vérificateur général du Canada et le contrôle du développement durable.

DÉFINITIONS

Définitions

2. Les définitions qui suivent s'appliquent à la présente loi.

« commissaire »

« commissaire » Le commissaire à l'environnement et au développement durable nommé en application du paragraphe 15.1 (1).

« développement durable »

« développement durable » Développement qui permet de répondre aux besoins du présent sans compromettre la possibilité pour les générations futures de satisfaire les leurs.

« ministère de catégorie I »

« ministère de catégorie I »

a) Tout ministère mentionné à l'annexe I de la *Loi sur la gestion des finances publiques;*

b) tout ministère ayant fait l'objet de la directive prévue au paragraphe 24(3);

c) tout ministère, au sens de la *Loi sur la gestion des finances publiques*, mentionné à l'annexe.

« ministre compétent »

« ministre compétent » S'entend au sens de l'article 2 de la *Loi sur la gestion des finances publiques.*

« stratégie de développement durable »

« stratégie de développement durable » Stratégie comportant les objectifs et plans d'action d'un ministère de catégorie I en vue de promouvoir le développement durable.

FONCTIONS

Examen

5. Le vérificateur général est le vérificateur des comptes du Canada, y compris ceux qui ont trait au Trésor et, à ce titre, il effectue les examens et enquêtes qu'il juge nécessaires pour lui permettre de faire rapport comme l'exige la présente loi.

Idem

6. Le vérificateur général examine les différents états financiers qui doivent figurer dans les Comptes publics en vertu de l'article 64 de la *Loi sur la gestion des finances publiques* et tous autres états que lui soumet le président du Conseil du Trésor ou le ministre des Finances pour vérification; il indique si les états sont présentés fidèlement et conformément aux conventions comptables énoncées pour l'administration fédérale et selon une méthode compatible avec celle de l'année précédente; il fait éventuellement des réserves.

Rapports à la Chambre des communes

7. (1) Le vérificateur général établit à l'intention de la Chambre des communes un rapport annuel; il peut également établir à son intention — outre les rapports spéciaux prévus aux paragraphes 8(1) ou 19(2) et le rapport établi par le commissaire en application du paragraphe 23(2) — au plus trois rapports supplémentaires par année. Dans chacun de ces rapports :

a) il fournit des renseignements sur les activités de son bureau;

b) il indique s'il a reçu, dans l'exercice de ces activités, tous les renseignements et éclaircissements réclamés.

approche qui tient compte du développement durable dans l'élaboration des politiques gouvernementales. Le commissaire, au nom du vérificateur général, est chargé de coordonner la réception des pétitions des Canadiens, de surveiller les réponses données par le ministre compétent et de rendre compte à la Chambre des communes du sujet et de l'état des pétitions.

61. La pièce 6 expose les étapes du processus de pétition. À ce jour, nous avons reçu une pétition concernant l'évaluation environnementale d'un projet parrainé par l'Agence de promotion économique du Canada atlantique (APECA). La pétition a été transmise au ministre responsable de l'Agence. Le Ministre a répondu officiellement à la pétition, et le commissaire a reçu une copie de sa réponse.

Faire une différence

62. À l'instar du vérificateur général je veux faire une différence et c'est pourquoi j'ai accepté ce poste. À la fin de mon mandat, je veux être en mesure de décrire les réalisations concrètes auxquelles nous aurons contribué — à savoir que l'environnement sera plus sain et que nous serons plus près de faire du développement durable une réalité. Les priorités et le plan de travail exposés dans ce premier rapport sont les moyens d'y parvenir.

L'ouverture et la transparence sont des éléments essentiels du développement durable.

série d'études sur des questions « d'actualité » seront réalisées et les résultats seront présentés au Parlement dans les prochains rapports annuels du commissaire.

58. L'objet de ces études est triple :

- aider à asseoir la capacité des ministères fédéraux à préparer et à mettre en oeuvre les stratégies de développement durable;
- examiner les éléments essentiels du rendement du gouvernement en matière de protection de l'environnement et de promotion du développement durable qui pourraient ne pas se prêter à un cadre strict de vérification;
- élaborer des critères de vérification ainsi que des critères pour l'examen des stratégies de développement durable.

59. Au cours de l'année à venir, nous réaliserons des études spéciales sur les sujets suivants :

- **Respect de nos obligations internationales.** Le Canada est signataire d'un large éventail d'ententes internationales visant à protéger et à améliorer l'environnement. Cette étude fournira un inventaire de ces ententes ainsi qu'une évaluation initiale et un aperçu de la mesure dans laquelle le Canada respecte ses engagements en vertu de celles-ci.
- **Rendement du secteur public et du secteur privé.** Une vérification effectuée en 1995 révélait que les entreprises privées interviewées étaient généralement plus avancées que les ministères et les organismes fédéraux dans la mise en oeuvre de systèmes complets de gestion de l'environnement. Néanmoins, très peu d'éléments des systèmes avaient été intégralement développés dans le secteur public ou dans le secteur privé. Nous réaliserons d'autres études des différences entre le rendement du secteur public et celui du secteur privé, afin de cerner les meilleures pratiques et de déterminer la possibilité de les appliquer aux deux secteurs.
- **Mesure du rendement.** Dans leur stratégie de développement durable, les ministères sont tenus d'exposer leurs buts et objectifs, y compris les points de repère dont ils se serviront pour mesurer leur rendement. Cette étude vise à faire avancer l'élaboration de mesures du rendement et leur application à la gestion des questions liées à l'environnement et au développement durable.
- **Comptabilité du développement durable.** Pour prendre de sages décisions au sujet de l'environnement et du développement durable, il faut comprendre les coûts et les avantages relatifs de l'action et de l'inaction. Dans certains domaines, ces coûts et avantages peuvent être mesurés et ils peuvent être considérés dans la prise de décision. Dans d'autres, la capacité de les mesurer est actuellement assez limitée. Nous évaluerons l'état des connaissances afin de cerner les meilleures pratiques.

Pièce 6

Sommaire du processus de pétition

- Un résidant du Canada peut envoyer une pétition au vérificateur général si une question environnementale relevant d'un ministère fédéral le préoccupe.
- Le commissaire, au nom du vérificateur général, ouvre un dossier et transmet la pétition dans les 15 jours suivant sa réception au ministre compétent pour réponse.
- Le ministre envoie un accusé de réception au pétitionnaire et au commissaire dans les 15 jours suivant la date où il reçoit la pétition.
- Le ministre doit répondre à la pétition transmise par le commissaire dans les 120 jours suivant sa réception.
- Au besoin, le ministre peut, dans ce délai, prolonger celui-ci en avisant le pétitionnaire et le commissaire.

Pétitions

60. L'ouverture et la transparence sont deux des éléments essentiels d'une

compréhension des exigences au sein du ministère sont les trois principales difficultés que pose la préparation des stratégies.

L'intégration du quatrième « E » aux travaux du Bureau

54. La principale activité du Bureau du vérificateur général est la vérification législative, qui consiste notamment à vérifier les états financiers du gouvernement fédéral, sa conformité aux lois et aux règlements fédéraux, sa protection des biens publics, sa perception des recettes et sa mise en oeuvre des politiques et des programmes, et à en faire rapport. La dernière catégorie est appelée vérification de « l'optimisation des ressources ».

55. Traditionnellement, ces vérifications sont réalisées selon les principes de *l'économie, de l'efficience et de l'efficacité* — connus comme les trois « E ». Comme suite aux modifications apportées à la *Loi sur le vérificateur général*, « l'environnement » s'ajoute aux trois « E » dont le vérificateur général tient compte lorsqu'il détermine les questions à communiquer à la Chambre des communes. Une explication du quatrième « E » est présentée à la pièce 5.

56. Trois priorités ont été établies pour l'examen des questions liées à l'environnement et au développement durable. Par ordre d'importance, ce sont :

- **L'amélioration de la prise de décision**. Les problèmes environnementaux et le développement non durable découlent en définitive de mauvaises décisions. Un certain nombre d'activités du gouvernement fédéral influent sur la prise de décision, au gouvernement fédéral et dans la société en général. Au cours des deux prochaines années, trois activités fédérales seront vérifiées : l'évaluation environnementale, l'information communiquée sur l'environnement, et la conformité aux lois et règlements environnementaux et leur application.

- **Principales sources d'inquiétude pour les Canadiens**. Un certain nombre de questions principales liées à l'environnement et au développement durable seront également examinées; par exemple, le mouvement transfrontalier des déchets dangereux, l'appauvrissement de la couche d'ozone, les changements climatiques et le développement durable des pêches. Pour ces questions clés, la reddition de comptes et les meilleures pratiques revêtent une importance particulière.

- **Les programmes**. Enfin, d'autres questions plus précises liées aux programmes ayant une composante importante en matière d'environnement ou de développement durable seront vérifiées, notamment l'efficacité énergétique et les immobilisations dans nos parcs nationaux.

L'environnement est le quatrième « E » dont tient compte le Bureau du vérificateur général dans ses travaux.

Etudes d'intérêt particulier pour le Parlement

57. Un autre volet du travail du commissaire comprend l'étude de questions liées à l'environnement et au développement durable qui intéressent tout particulièrement le Parlement. Une

Pièce 5

Les quatre « E »

Au cours d'une vérification, le vérificateur pose des questions comme celles-ci :

- L'argent a-t-il été dépensé en tenant dûment compte de l'**économie**?
- L'argent a-t-il été dépensé en tenant dûment compte de l'**efficience**?
- Des procédures ont-elles été établies pour mesurer **l'efficacité** des programmes et en rendre compte?
- L'argent a-t-il été dépensé en tenant dûment compte de l'incidence **environnementale**?

- **orientée vers les résultats**, car celles-ci préciseront les principaux résultats que le ministère compte obtenir en matière de développement durable et de la façon dont il mesurera son rendement à cet égard;

- **établie en consultation** avec les clients, les partenaires et les intervenants du ministère.

50. Le *Guide* propose également aux ministères une méthode pour préparer leur stratégie. Les principaux éléments sont exposés à la pièce 4. Le gouvernement a également rendu publics d'autres documents portant sur des éléments plus précis des stratégies des ministères : les *Directives sur l'écologisation des opérations gouvernementales* et le *Guide d'autoévaluation des systèmes de gestion de l'environnement (SGE)*. Ces documents feront partie du cadre d'évaluation des stratégies.

51. Les stratégies porteront aussi sur la gestion des questions liées à l'environnement et au développement durable qui ressortissent au mandat de plusieurs ministères et aux compétences de plusieurs administrations. Un certain nombre de mécanismes ont été créés pour que les ministères partagent l'information et l'expérience qu'ils auront acquises lors de la préparation des stratégies de développement durable. Nous évaluerons la mesure dans laquelle ils fonctionnent bien.

52. En décembre 1996, les sous-ministres et les administrateurs généraux d'organismes ont eu à répondre à un bref questionnaire sur l'état de préparation de leur stratégie de développement durable. La plupart des répondants en sont aux premières étapes de la préparation, bien que certains ministères aient déjà mené des consultations internes et externes. Trois ou quatre ministères sont suffisamment avancés et prévoient déposer leur stratégie bien avant l'échéance de décembre 1997.

53. Selon les réponses des ministères, la mesure du rendement, les questions qui ressortissent au mandat de plusieurs ministères, et la connaissance et la

Pièce 4

La préparation d'une stratégie de développement durable

i. **Le profil du ministère**
Recenser ce que fait le ministère et comment il le fait.

ii. **L'étude de la question**
Évaluer les activités du ministère par rapport aux répercussions qu'elles ont sur le développement durable.

iii. **Les consultations**
Obtenir les vues des clients, des partenaires et des autres parties intéressées sur les priorités des ministères en vue du développement durable et sur la façon de les réaliser.

iv. **Les buts, les objectifs et les échéances**
Définir les buts et les objectifs du ministère en matière de développement durable, y compris les points de repère dont il se servira pour mesurer son rendement.

v. **Le plan d'action**
Comment le ministère traduira ses objectifs de développement durable en résultats mesurables, y compris les modifications particulières qu'il apportera à ses politiques, à ses programmes, à ses lois, à ses règlements et à ses opérations.

vi. **La mesure, l'analyse et le rapport du rendement**
Les mécanismes que le ministère établira pour surveiller et améliorer son rendement.

Source : Gouvernement du Canada, *Guide de l'écogouvernement*, 1995

Pièce 3

Questions liées à l'environnement et au développement durable : le plan de travail du commissaire

Tâches	En 1997–1998	En 1998–1999
Stratégies de développement durable des ministères	Élaborer des critères de vérification Élaborer et mettre en oeuvre une stratégie de développement durable pour le Bureau du vérificateur général	Vérifier 12 stratégies ministérielles
Intégrer le quatrième « E » dans les travaux du Bureau du vérificateur général	Élaborer des lignes directrices visant à intégrer les considérations environnementales à tous les travaux de vérification du Bureau Faire les vérifications suivantes : • Contrôle des mouvements transfrontaliers de déchets dangereux • L'efficacité énergétique • La stratégie du poisson de fond de l'Atlantique / Pêches durables • L'appauvrissement de la couche d'ozone • Les immobilisations de Parcs Canada • L'habitat du saumon • L'évaluation environnementale • L'administration des programmes de rétablissement agricole des Prairies	Faire les vérifications suivantes : • Information communiquée sur le rendement environnemental • Conformité et observation en matière d'environnement • Changements climatiques • Le développement de pêches durables du saumon • Pêches durables : côte est
Études spéciales	Faire les études suivantes : • Les engagements internationaux du Canada • Le rendement environnemental dans les secteurs public et privé • La mesure du rendement • Comptabilité du développement durable Établissement du programme d'études de 1998–1999	Effectuer le programme d'études de 1998–1999, établi en 1997-1998
Pétitions	Faire un suivi au nom du vérificateur général	Faire un suivi au nom du vérificateur général

ministères ont mis en oeuvre les plans d'action et atteint les objectifs associés à leurs stratégies.

- **Vérifications et études spéciales de questions liées à l'environnement et au développement durable.** L'environnement et le développement durable font dorénavant partie des aspects considérés officiellement par le vérificateur général lorsqu'il détermine les questions à examiner et à communiquer à la Chambre des communes.

- **Pétitions.** Le commissaire reçoit les pétitions sur des questions environnementales qui sont la responsabilité des ministères et des organismes fédéraux, et fait le suivi des réponses données par le gouvernement à celles-ci.

- **Rapport.** Le commissaire rend compte tous les ans à la Chambre des communes de ces questions et des autres questions liées à l'environnement et au développement durable qui, à son avis, doivent être portées à l'attention de la Chambre.

Les stratégies des ministères sont essentielles à l'avancement du programme de développement durable.

Plan de travail du Bureau du commissaire

Objectifs

46. Quatre objectifs guideront le plan de travail du Bureau du commissaire au cours des deux années à venir :

- Fournir des analyses et des recommandations objectives et indépendantes aux députés pour les aider à examiner les activités liées à l'environnement et au développement durable du gouvernement et à l'en tenir responsable.

- Travailler avec les ministères et les organismes fédéraux pour les aider à renforcer leur capacité de gérer les questions liées aux deux domaines en encourageant l'adoption des meilleures pratiques de gestion.

- S'occuper à la fois de protection de l'environnement et de développement durable, en insistant sur la prise de meilleures décisions au gouvernement fédéral. À court terme, nous surveillerons particulièrement les efforts déployés par le gouvernement fédéral pour protéger l'environnement.

- Continuer de mettre l'accent sur les principales faiblesses de la gestion par le gouvernement fédéral des questions liées au développement durable que le Bureau du vérificateur général a décelées au cours des travaux précédents, et sur la mesure dans laquelle les ministères réussissent à les corriger. Ces faiblesses comprennent : l'écart entre les objectifs et la réalité, le manque de coordination et d'intégration des activités des ministères et d'autres administrations; et les lacunes de l'examen du rendement et de l'information communiquée au Parlement.

Le plan de travail

47. Le plan de travail du commissaire comprend quatre éléments principaux; ceux-ci sont résumés à la pièce 3.

Examen des stratégies de développement durable

48. Les stratégies de développement durable des ministères sont essentielles à l'avancement du programme du gouvernement fédéral en la matière et à la mesure des progrès réalisés par rapport à celui-ci. Au cours de l'année à venir, nous élaborerons, de concert avec les ministères et les organismes, des critères particuliers pour l'examen des stratégies des ministères.

49. Le cadre énoncé dans le *Guide de l'écogouvernement* servira de point de départ. Le *Guide* indique que chacune des stratégies devrait être :

- **globale**, car celles-ci devront traiter des politiques et des programmes du ministère et de la façon dont il gère ses opérations internes;

Pièce 2

Commissaire à l'environnement et au développement durable : dates clés

1989	Une coalition formée de groupes environnementaux, de conservation et d'autochtones présente un plan environnemental au gouvernement fédéral (*Créer un Canada vert*). Elle propose, dans ce plan, de nommer un vérificateur général de l'environnement indépendant (VGE), qui serait chargé d'examiner les activités fédérales en vue de s'assurer de leur conformité aux lois et aux règlements relatifs à l'environnement.
Automne 1990	Le Comité permanent de l'environnement de la Chambre des communes discute de l'utilité de charger un VGE de surveiller les progrès des ministères et des organismes fédéraux qui doivent établir et atteindre des objectifs de réduction des gaz à effet de serre.
Décembre 1990	Un projet de loi d'initiative parlementaire visant la création du poste de VGE est déposé au Parlement. Le VGE vérifierait les opérations du gouvernement pour s'assurer que ses activités, ses programmes ou ses initiatives sont compatibles avec la protection et l'amélioration de l'environnement.
Février 1992	Le Comité permanent des comptes publics de la Chambre des communes demande au vérificateur général de donner son opinion concernant la nécessité de nommer un VGE. Le vérificateur général fait remarquer que le rôle du VGE et le choix d'une personne pour occuper ce poste donnent lieu à des divergences d'opinion. La plupart des définitions ne sont pas compatibles avec le mandat et les ressources du Bureau du vérificateur général.
Été 1993	Le Parti libéral s'engage à nommer un VGE indépendant qui relèverait directement du Parlement. Le VGE surveillerait la mesure dans laquelle les dépenses et les programmes fédéraux appuient le développement durable et ferait rapport annuellement à ce sujet.
Mars 1994	Le gouvernement demande au Comité permanent de l'environnement et du développement durable d'examiner la notion d'un VGE chargé de s'assurer que les activités du gouvernement sont menées en accordant l'importance voulue au développement durable.
Mai 1994	Le Comité permanent recommande la création du poste de commissaire à l'environnement et au développement durable. Le commissaire agirait indépendamment du gouvernement et aurait deux grands rôles : examiner la mesure dans laquelle les politiques, les programmes et les dépenses du gouvernement appuient l'engagement du Canada à l'égard du développement durable; encourager le gouvernement, le Parlement et le public à appuyer cet engagement et, à cette fin, assurer la liaison entre les parties intéressées et exercer une surveillance.
Octobre 1994	Le gouvernement donne suite au rapport du Comité. Il propose la création d'un poste de commissaire à l'environnement et au développement durable au Bureau du vérificateur général et il demande aux ministres de préparer des stratégies de développement durable pour leurs ministères et de les déposer au Parlement.
Juin 1995	Le gouvernement publie le *Guide de l'écogouvernement* afin d'aider les ministères à préparer leur stratégie de développement durable.
Décembre 1995	Les modifications à la *Loi sur le vérificateur général,* qui créent le poste de commissaire à l'environnement et au développement durable, reçoivent la sanction royale.
Juin 1996	Le premier commissaire à l'environnement au développement durable est nommé.
Novembre 1996	Le Groupe des conseillers du commissaire est mis sur pied. Ses membres forment un échantillon représentatif de la communauté de l'environnement et du développement durable du Canada.
Mars 1997	Le premier rapport annuel du commissaire est déposé au Parlement au nom du vérificateur général.
Décembre 1997	Présentation des stratégies de développement durable de 24 ministères et organismes fédéraux.

manquent d'information sur les avantages que les Canadiens tirent des programmes environnementaux du gouvernement. Par exemple, le vérificateur général a indiqué que l'information communiquée sur les efforts déployés par le gouvernement fédéral pour « écologiser » ses activités n'était ni complète ni objective.

Le mandat du commissaire à l'environnement et au développement durable

La nécessité d'améliorer la reddition de comptes

Le travail du commissaire permettra d'améliorer le rendement du gouvernement grâce à une meilleure reddition de comptes.

40. Les débats sur la nécessité d'un poste de ce genre remontent à tout le moins à 1989 (voir la pièce 2). Cette année-là, une coalition de groupes environnementaux, de conservation et d'autochtones ont proposé la nomination d'un vérificateur général de l'environnement (VGE), qui constituerait un volet d'une vaste stratégie environnementale intégrée pour le Canada. Le VGE proposé aurait relevé directement du Parlement et son mandat aurait consisté essentiellement à déterminer si le gouvernement fédéral respectait les lois et règlements environnementaux.

41. Un thème commun du débat ultérieur sur le VGE était la nécessité pour le gouvernement fédéral d'améliorer son rendement en matière de protection de l'environnement et de promotion du développement durable et d'en être tenu responsable. On a fait des parallèles avec le rôle du vérificateur général qui consiste à aider le Parlement à tenir le gouvernement responsable de la perception des recettes et de la dépense des fonds publics.

42. Les parlementaires ont discuté d'un certain nombre de variantes du concept de VGE. La majeure partie du débat était centrée sur la nécessité d'éviter le chevauchement des rôles et des responsabilités avec ceux d'autres participants au processus de gestion des politiques gouvernementales, comme les groupes environnementaux, Environnement Canada et le vérificateur général.

43. Le gouvernement fédéral a choisi un ensemble d'initiatives visant à améliorer la reddition de comptes au public et la participation de celui-ci. Les modifications à la *Loi sur le vérificateur général*, qui ont permis la création du poste de commissaire à l'environnement et au développement durable (voir l'annexe A), en font partie. Le commissaire aide le vérificateur général à exécuter les fonctions prévues dans la Loi en ce qui a trait à l'environnement et au développement durable.

Le mandat d'aider les parlementaires

44. Les modifications à la *Loi sur le vérificateur général* respectent la tradition de la responsabilité ministérielle devant le Parlement. Les ministres sont responsables des orientations stratégiques. Le rôle du commissaire est d'aider les parlementaires à surveiller les efforts déployés par le gouvernement fédéral pour protéger l'environnement et favoriser le développement durable.

45. Plus précisément, le commissaire a des responsabilités dans quatre domaines principaux :

- **Surveillance des stratégies de développement durable**.
Vingt-quatre ministères et organismes fédéraux sont tenus de préparer des stratégies de développement durable et de les déposer à la Chambre des communes au plus tard le 15 décembre 1997 (voir l'annexe C). Le commissaire est chargé de surveiller la mesure dans laquelle les

responsable avec d'autres parties d'établir le cadre des lois et des règlements qui régissent l'utilisation que nous faisons de l'environnement.

- **En qualité de fournisseur de services et de programmes**, le gouvernement fédéral contribue au bien-être économique et social de la société. Par exemple, il fournit la majeure partie de l'expertise scientifique nécessaire pour protéger l'environnement et favoriser le développement durable, et il assure des services essentiels comme les prévisions météorologiques et l'inspection des aliments.

Le rendement du gouvernement fédéral

36. Des progrès ont été réalisés dans un certain nombre de domaines, mais ils ne sont pas uniformes. Nombre de questions liées à l'environnement et au développement durable sont, par leur nature, difficiles à gérer. Elles posent aux gouvernements d'énormes défis. Elles sont souvent complexes sur le plan scientifique, exigent beaucoup de temps et ne correspondent pas parfaitement au mandat ou aux compétences d'un seul ministère ou gouvernement.

37. La portée mondiale des questions environnementales augmente d'autant la complexité des problèmes à régler. Il ne suffit plus de tenter de résoudre nos propres problèmes environnementaux, même si cela demeure important. Par exemple, l'appauvrissement de la couche d'ozone est un problème mondial. Nous souffrons non seulement des conséquences de notre propre action et de notre inaction, mais également de celles de tous les habitants de la terre.

38. Au cours de la dernière décennie, le Bureau du vérificateur général a été de plus en plus actif dans le domaine environnemental et a fait oeuvre de pionnier en appliquant les principes de la vérification à l'environnement. Le Bureau a réalisé quelque 42 vérifications de questions ayant une composante importante liée à l'environnement ou au développement durable. (La liste de ces vérifications se trouve à l'annexe B).

39. Ces vérifications fournissent un point de vue valable sur le rendement du gouvernement fédéral dans la gestion de questions liées à ces deux domaines particuliers. Trois thèmes clés ressortent de notre examen de ces questions.

La gestion par le gouvernement fédéral des questions liées à l'environnement ou au développement durable présente des faiblesses.

- **Écart entre les objectifs et la réalité.** Dans de nombreux domaines, le rendement du gouvernement fédéral est inférieur aux objectifs qu'il a énoncés. Cet écart reflète l'incapacité de traduire l'orientation politique en mesures efficaces. Il peut s'agir de non-conformité au processus d'évaluation et d'examen en matière d'environnement jusqu'à l'incapacité d'atteindre des objectifs pour des programmes clés.

- **Manque de coordination et d'intégration.** La plupart des questions les plus pressantes auxquelles fait face le gouvernement aujourd'hui ressortissent au mandat de plusieurs ministères et aux compétences de plusieurs administrations. La gestion de ces soi-disant questions horizontales a posé un défi tout particulier pour les gouvernements. Reconnaissant le partage des responsabilités en matière d'environnement et de développement durable, le vérificateur général, dans son rapport de 1990 au Parlement, posait la question suivante : « Qui mène la boutique? » La question est encore d'actualité.

- **Lacunes de l'examen du rendement et de l'information communiquée au Parlement.** L'examen du rendement est un important outil de gestion et la communication de l'information au Parlement est essentielle à la reddition de comptes. Le vérificateur général a constaté des lacunes dans les deux activités. Tant la haute direction des ministères que les parlementaires

Il reste des défis importants à relever afin de protéger l'environnement et de favoriser le développement durable.

nouveaux produits chimiques toxiques, du smog en zone urbaine et de la contamination des eaux souterraines. Comparativement à d'autres pays, nous consommons par habitant beaucoup d'énergie et d'autres ressources naturelles et nous produisons beaucoup de pollution et de déchets. Les projections préparées récemment pour les ministres fédéraux-provinciaux de l'énergie et de l'environnement laissent entendre que le Canada sera loin d'atteindre son objectif en matière de réduction des gaz à effet de serre.

32. En résumé, nous avons fort à faire pour réduire le fardeau de la pollution, gérer nos ressources naturelles, intégrer la prise de décision en matières environnementale, sociale et économique et respecter nos engagements sur la scène internationale.

Les Canadiens attendent davantage

Le gouvernement fédéral a un rôle important à jouer.

33. Les Canadiens s'inquiètent de la qualité de notre environnement, et de son incidence sur leur santé et sur la santé et les perspectives de leurs enfants. Un sondage d'opinion publique réalisé récemment par Synergistics Consulting Limited, et les études de surveillance de l'environnement d'Environics Research Group Ltd. révèlent, entre autres, que :

- **Les Canadiens demeurent très inquiets de la qualité de l'environnement.** Une majorité de Canadiens sont « très inquiets » de problèmes comme le danger que posent les produits chimiques toxiques et la mauvaise qualité de l'air et de l'eau. Cette inquiétude a marqué toute la dernière décennie.

- **Il reste beaucoup à faire.** Les Canadiens sont conscients que certains progrès ont été réalisés au cours des dix dernières années pour réduire la pollution et la ramener à des niveaux sécuritaires, mais qu'il reste encore beaucoup à faire. Ils estiment en moyenne que nous avons parcouru seulement le tiers du chemin vers l'atteinte d'un environnement « sécuritaire ».

- **Les Canadiens s'interrogent sur la capacité du gouvernement de faire une différence.** Une faible majorité de Canadiens croient que le gouvernement fédéral ne semble plus en mesure de jouer un rôle important dans l'atteinte d'un environnement durable au Canada à plus long terme.

34. Comme l'indiquait le vérificateur général dans son rapport de novembre 1996, un certain nombre d'analystes ont conclu que l'un des changements les plus importants survenus ces dernières années a été la perte de confiance du public dans les gouvernements. L'incapacité des gouvernements de tenir leurs promesses dans des secteurs d'importance clé aux yeux des Canadiens est cité par ces analystes comme une cause principale de cette perte de confiance. L'environnement est l'un de ces secteurs clés.

Le rôle du gouvernement fédéral

35. Le gouvernement fédéral a un rôle important à jouer pour protéger l'environnement et favoriser le développement durable. Son influence se fait sentir de trois manières :

- **En qualité d'employeur, de propriétaire et d'acheteur**, le gouvernement fédéral est la plus grande entreprise au Canada. La façon dont il gère ses activités quotidiennes a d'importantes répercussions sur l'environnement et le développement durable.

- **En tant que responsable de l'élaboration et de l'observation des règles**, le gouvernement fédéral exerce une influence importante, par ses politiques, sur les décisions prises par chaque producteur et consommateur. Plus particulièrement, le gouvernement est

Pièce 1

De Stockholm à Rio : événements marquants qui ont défini le programme international de l'environnement et du développement durable

IL Y A VINGT-CINQ ANS, la Conférence des Nations Unies sur l'environnement avait lieu à Stockholm, en Suède. Bon nombre des messages clés qui sont issus de cette réunion historique sont au coeur du concept de développement durable, et ils sont toujours actuels. La reconnaissance des relations constitue un thème central : l'interdépendance des êtres humains et de l'environnement naturel; les liens entre le développement économique et social et la protection de l'environnement; et la nécessité d'une vision globale et de principes communs.

> *La protection et l'amélioration de l'environnement est une question d'importance majeure qui affecte le bien-être des populations et le développement économique dans le monde entier . . .*
>
> Déclaration de la Conférences des Nations Unies sur l'environnement, 1972

IL Y A DIX ANS, la Commission mondiale sur l'environnement et le développement des Nations Unies (que l'on appelle souvent la Commission Brundtland, du nom de son président) publiait son rapport historique intitulé *Notre avenir à tous.* Se fondant sur bon nombre des idées examinées à Stockholm, en 1972, la Commission a formulé un précepte général pour le « développement durable » qui tient compte des liens entre la croissance économique, le développement humain et la protection de l'environnement. Il exige une transformation fondamentale de l'orientation et des valeurs de la politique gouvernementale.

> *Nous avons les moyens d'assurer un développement durable — de répondre aux besoins du présent sans compromettre la possibilité pour les générations futures de satisfaire les leurs. La notion de développement durable a néanmoins des limites — non pas des limites absolues, mais celles qui sont imposées par l'état actuel de la technologie et l'organisation sociale aux ressources de l'environnement et par la capacité de la biosphère d'absorber les répercussions de l'activité humaine. Il est toutefois possible de maîtriser la technologie et d'améliorer l'organisation sociale pour établir une nouvelle ère de croissance économique.*
>
> *Notre avenir à tous*, Commission mondiale sur l'environnement et le développement, 1987

IL Y A CINQ ANS, soit en 1992, avait lieu à Rio de Janeiro la Conférence des Nations Unies sur l'environnement et le développement (CNUED), mieux connue sous le nom de Sommet de la Terre. Plus de 30 000 personnes y ont assisté, y compris des représentants de 178 pays et d'organismes non gouvernementaux. Tout comme les nombreux thèmes de la Conférence de Stockholm et le rapport *Notre avenir à tous*, cette conférence mettait l'accent sur la mondialisation des problèmes environnementaux et la nécessité d'une action internationale concertée afin d'assurer le progrès économique à long terme et la santé de la biosphère. Au terme de la Conférence, 105 dirigeants mondiaux se sont réunis pour témoigner de leur engagement à l'égard du développement durable.

Voici quelques-unes des initiatives qui ont découlé du Sommet de la Terre de Rio :

- la Déclaration de Rio — une série de principes qui guideront le développement futur;
- Action 21 — un document complet que beaucoup de personnes considèrent comme le « plan directeur » du développement durable pour le XXI^{e} siècle;
- la Convention cadre sur le changement climatique;
- la *Convention sur la diversité biologique*;
- un énoncé de Principes directeurs sur les forêts

en matière d'environnement et de développement durable (voir la pièce 1).

- **Le 25e anniversaire de la Conférence des Nations Unies sur l'environnement.** La « Conférence de Stockholm » reconnaissait l'interdépendance des personnes et de l'environnement, et les liens entre le développement économique et social et la protection de l'environnement.

- **Le dixième anniversaire du rapport de la Commission mondiale sur l'environnement et le développement.** *Notre avenir à tous* présentait une vision mondiale du développement durable, liant le bien-être social à la prospérité de l'économie et à la santé de l'environnement.

- **Le cinquième anniversaire de la Conférence des Nations Unies sur l'environnement et le développement.** La « Conférence de Rio » portait essentiellement sur la mondialisation des questions environnementales et la nécessité d'une coopération internationale pour garantir un développement durable.

26. Partout dans le monde, des pays font le point sur les mesures prises pour protéger l'environnement et favoriser le développement durable. Qu'avons-nous réalisé? Qu'avons-nous appris? Qu'allons-nous faire? Le Canada a progressé, mais il reste encore beaucoup à faire.

Atouts du Canada

27. Dans sa poursuite du développement durable, le Canada possède un large éventail d'actifs. Certains d'entre eux sont naturels. Par exemple, le Canada s'étend sur près de dix millions de kilomètres carrés, et est bordé par trois océans. Nous sommes les gardiens d'environ neuf pour cent des sources d'eau douce renouvelable de la planète, de dix pour cent de ses forêts et d'importantes réserves de pétrole, de gaz, de charbon et d'autres minerais.

28. Mais ce qui compte peut-être encore plus, c'est le talent, l'énergie et l'ingéniosité des Canadiens. La majeure partie du développement économique et du bien-être du Canada vient de l'application de technologies plus sophistiquées que jamais, d'une main-d'oeuvre de plus en plus instruite et de notre formidable base de ressources renouvelables et non renouvelables. Le Canada a atteint un niveau de développement humain qui fait l'envie d'une grande partie du monde.

Le Canada a atteint un niveau de développement humain qui fait l'envie d'une grande partie du monde.

Quelques réalisations

29. Depuis le dernier quart de siècle, le Canada donne une impulsion à la coopération internationale dans le domaine des questions environnementales. Ainsi, il a joué un rôle important dans l'établissement du Protocole de Montréal, régime international qui vise à protéger la couche d'ozone de la terre. La signature de l'Accord Canada-États-Unis sur la qualité de l'air, qui porte sur les pluies acides et la pollution atmosphérique transfrontalière, en est un autre exemple.

30. *L'état de l'environnement au Canada — 1996* documente les progrès que nous avons réalisés dans un certain nombre de domaines pour promouvoir un environnement plus sain. Par exemple, comparativement à la plupart des autres pays, le Canada jouit d'une eau de qualité relativement bonne. Les principales industries ont réduit sensiblement leur niveau de pollution. La qualité de l'air s'est améliorée et nous protégeons mieux notre patrimoine naturel et réduisons les déchets.

Il reste des défis importants à relever

31. Cependant, il reste des défis importants à relever, dont la gestion des

17. Le développement durable pose des défis uniques. Pouvons-nous intégrer nos préoccupations sociales, économiques et environnementales? Pouvons-nous favoriser la croissance économique et le développement social sans compromettre gravement l'environnement naturel dont nous dépendons tous? Je pense que nous le pouvons.

18. L'objectif est d'en arriver à un équilibre raisonnable entre les nombreux éléments du développement durable qui sont importants aux yeux des Canadiens. Cependant, mon plan de travail immédiat porte particulièrement sur l'environnement. Les priorités économiques et sociales ont toujours bénéficié d'une importance plus grande et plus explicite dans les mandats des ministères. Une partie de mon travail est de redresser ce déséquilibre en favorisant l'environnement de façon plus systématique.

19. Il y a 25 ans, les fondements du développement durable étaient énoncés pour la première fois lors de la Conférence des Nations Unies sur l'environnement à Stockholm. Il y a dix ans, la Commission Brundtland publiait le document historique *Notre avenir à tous*. Et il y a cinq ans, des représentants de 178 nations se réunissaient à Rio de Janeiro pour jeter les bases du développement durable à l'échelle mondiale. Il est temps de prendre le développement durable au sérieux, de se mettre au travail et de mettre le concept en pratique.

20. Il n'existe que peu de solutions rapides aux problèmes environnementaux, et le développement durable exigera de la persévérance, des efforts soutenus et ciblés et de la patience. Ce sera un travail long, qui exigera des changements systémiques afin de faire une différence véritable pour les générations présentes et futures.

Nous avons tous un rôle à jouer

21. Dans l'exercice de mes fonctions, je solliciterai les conseils d'experts de l'environnement et du développement durable. Un comité consultatif de 14 membres a été créé pour m'aider à établir les priorités et un programme de travail (voir l'annexe D).

22. Chaque Canadien a également un rôle important à jouer. Les ministères consulteront leurs clients et les parties intéressées au cours de la préparation de leur stratégie. De plus, le processus de pétition donne aux Canadiens un instrument officiel pour faire des observations sur les questions environnementales qui relèvent des ministères fédéraux, et obtenir une réponse.

23. Je suis convaincu que le gouvernement peut être une force positive pour favoriser le développement durable. Même à l'heure des compressions budgétaires et de la réduction du déficit, le gouvernement fédéral peut assurer un leadership vigoureux, établir une vision claire, et s'engager à améliorer son rendement.

24. Le défi peut être relevé. Ce dont nous avons besoin, c'est la volonté, la discipline et l'engagement de la part de la direction de passer aux actes.

Le développement durable reflète l'importance que nous attachons à un environnement sain, à une économie prospère, de même qu'à l'équité et à la justice.

Une préoccupation de longue date qui prend de l'importance

Le contexte international

25. Ce rapport marque l'anniversaire de trois événements clés qui ont défini les programmes nationaux et internationaux

assurer la protection de l'environnement. La Commission mondiale sur l'environnement et le développement a défini le développement durable comme étant le développement qui permet de « répondre aux besoins du présent sans compromettre la possibilité pour les générations futures de satisfaire les leurs ». Cette définition, qui a été utilisée dans les modifications apportées à la *Loi sur le vérificateur général* en vue de créer le poste de commissaire, sert de point de départ important pour mon travail.

16. Le développement durable me semble logique, et je pense que c'est le cas pour la plupart des Canadiens. Le développement durable reflète l'importance que nous attachons à un environnement sain, à une économie prospère, de même qu'à l'équité et à la justice. Il fait ressortir la nécessité d'intégrer ces facteurs à la prise de décision, afin de pouvoir progresser sur tous ces fronts. L'objectif est de prendre soin tant des gens que de l'environnement dont ils dépendent.

QU'EST-CE QUE LE DÉVELOPPEMENT DURABLE?

Une définition de travail du développement durable est essentielle pour orienter la préparation du programme du commissaire et pour examiner les stratégies des ministères.

Les principaux éléments du concept du développement durable ont vu le jour lors de la Conférence des Nations Unies sur l'environnement de 1972, à Stockholm, en Suède. Les thèmes centraux de la Conférence étaient l'interdépendance entre les êtres humains et l'environnement naturel; les liens entre le développement économique et social et la protection de l'environnement; et la nécessité d'une vision mondiale et de principes communs.

Reprenant ces thèmes, la Commission mondiale sur l'environnement et le développement (la Commission Brundtland) a rendu public, en 1987, un rapport demandant un développement qui permet de « répondre aux besoins du présent sans compromettre la possibilité pour les générations futures de satisfaire les leurs ». La définition fait partie des modifications apportées à la *Loi sur le vérificateur général* et qui ont créé le poste de commissaire.

La Commission Brundtland a poursuivi en déclarant que : « ... le développement durable n'est pas un état fixe de l'harmonie, mais plutôt un processus d'évolution durant laquelle l'exploitation des ressources, l'orientation des investissements, l'avancement du développement technologique et les transformations institutionnelles sont conformes à nos besoins aussi bien futurs que présents ».

Le *Guide de l'écogouvernement* publié par le gouvernement fédéral explore davantage le concept du développement durable. Trois éléments essentiels du développement durable sont la *qualité de la vie, la prise de décision intégrée* et l'*équité*.

- L'élément *qualité de la vie* reconnaît que les Canadiens tiennent à de nombreux aspects différents de leur vie en société, y compris le développement économique et social *et* la conservation et l'amélioration de la qualité de l'environnement. Réconcilier le développement économique, l'équité sociale et la qualité de l'environnement est à la base du développement durable. Manifestement, les Canadiens veulent une économie performante. Une économie saine répond aux besoins d'emploi, à la sécurité économique et à l'amélioration des niveaux de vie. Elle permet aussi au Canada de poursuivre des objectifs sociaux qui sont les éléments clés de notre qualité de vie — y compris la santé, l'éducation et la protection de l'environnement — maintenant et pour les générations futures.

- Réconcilier le développement et la qualité de l'environnement veut dire attacher une attention particulière à la *prise de décision intégrée*. Comme l'a souligné le Comité permanent de l'environnement et du développement durable de la Chambre des communes, « L'intégration des éléments environnementaux et économiques, conjuguée à un souci d'équité, constitue la base même de la notion du développement durable ». Les relations entre les objectifs économiques, sociaux et environnementaux doivent être reconnues, et tout conflit entre eux qui peut apparaître doit être traité avec ouverture d'esprit, avec toutes les données en main et en tirant parti des meilleurs outils disponibles.

- L'engagement envers *l'équité* est un troisième élément du développement durable. L'équité suppose la distribution équitable des coûts et des avantages du développement entre les riches et les pauvres, entre les générations, et entre les nations. L'équité suppose également que nous avons tous les moyens de satisfaire à nos besoins fondamentaux, et que nous avons tous les mêmes droits fondamentaux.

Le développement durable *ne* veut *pas* dire le statu quo pour les ministères et les organismes fédéraux. Chaque ministère devra étudier soigneusement la façon de traduire le concept en un programme d'action concret.

Point de vue du commissaire

Mon premier rapport

8. C'est à la fois mon premier rapport à la Chambre des communes et le premier rapport d'un commissaire à l'environnement et au développement durable. Pour le préparer, j'ai consulté les parlementaires et les parties intéressées sur leurs attentes. Le rapport décrit mon mandat, énonce mes priorités et présente mon programme de travail pour les années à venir. Il jette les bases des futurs rapports qui porteront sur les efforts déployés par le gouvernement fédéral pour protéger l'environnement et favoriser le développement durable.

Rendement et reddition de comptes

9. En adoptant les modifications à la *Loi sur le vérificateur général* qui ont créé mon poste (voir l'annexe A), les parlementaires ont communiqué un message important aux Canadiens, à savoir qu'ils partagent leur inquiétude au sujet de la qualité de l'environnement et leur désir d'un développement durable. Ils se sont ainsi officiellement engagés à susciter un meilleur rendement du gouvernement fédéral dans ces deux domaines.

10. Mon travail consiste à aider les parlementaires dans cette tâche. Je fournirai des analyses et des recommandations objectives et indépendantes aux députés pour les aider à examiner le rendement du gouvernement fédéral et à l'en tenir responsable. Je compte également travailler directement avec les ministères et les organismes fédéraux pour promouvoir la reddition de comptes et l'application des meilleures pratiques dans la gestion des questions liées à l'environnement et au développement durable.

Environnement *et* développement durable

11. J'exerce les fonctions de commissaire à l'environnement *et* au développement durable. Mon point de vue sur ces deux domaines est donc essentiel à mon approche de ces fonctions, et aux objectifs et priorités que j'ai établis pour guider mon travail.

12. J'ai travaillé à des questions liées à ces deux domaines pendant la majeure partie de ma carrière. Cette expérience — et ma formation professionnelle — me donnent la conviction que le gouvernement a un rôle essentiel à jouer pour protéger l'environnement et favoriser le développement durable.

13. Pour obtenir les résultats que les Canadiens attendent, les gouvernements doivent assurer un leadership vigoureux et communiquer une vision claire. De plus, si nous voulons que la société en général modifie son comportement, le gouvernement fédéral doit donner l'exemple en favorisant une culture propice à la protection de l'environnement et à la promotion du développement durable dans ses propres ministères et organismes.

14. Qui plus est, je crois qu'un environnement sain est essentiel pour assurer la prospérité de notre économie et notre bien-être social en général. L'environnement que nous partageons fournit bon nombre des ressources que nous consommons et que nous utilisons pour produire des biens et des services. Et sans air et eau pures, ou sans la protection fournie par l'atmosphère terrestre, aucune vie ne serait possible.

15. À mon avis, c'est un cadre de développement durable qui peut le mieux

Mon travail consiste à aider les parlementaires.

Rapport du commissaire à l'environnement et au développement durable à la Chambre des communes – 1997

Points saillants

1. C'est à la fois mon premier rapport au Parlement et le premier rapport d'un commissaire à l'environnement et au développement durable. Il me fournit l'occasion d'exposer mon mandat, mes priorités et mon programme de travail. Le rapport présente également mon point de vue personnel sur quelques-unes des questions qui revêtent une importance cruciale pour ma fonction.

2. Le poste de commissaire a été créé en raison de l'inquiétude manifestée au sujet du rendement du gouvernement fédéral dans la protection de l'environnement et la promotion du développement durable. Une meilleure reddition de comptes est un moteur important d'amélioration du rendement du gouvernement. Mon rôle consiste à fournir des analyses et des recommandations objectives et indépendantes aux députés pour les aider à examiner les mesures prises par le gouvernement et à l'en tenir responsable.

3. Mon mandat porte à la fois sur l'environnement et le développement durable. Un environnement sain est essentiel pour assurer la prospérité de notre économie et notre bien-être social en général. Le développement durable reflète l'importance que nous attachons tant aux personnes qu'à l'environnement.

4. Les travaux réalisés par le Bureau du vérificateur général ont révélé des faiblesses fondamentales dans la gestion par le gouvernement fédéral des questions liées au développement durable : l'écart entre les engagements et les mesures concrètes; le manque de coordination entre les ministères et les administrations; et les lacunes de l'examen du rendement et de l'information communiquée au Parlement. Nous continuerons de mettre l'accent sur ces faiblesses de la gestion et sur la mesure dans laquelle les ministères réussissent à les corriger.

5. Notre programme de travail pour les deux prochaines années comprend quatre éléments principaux : l'examen des stratégies de développement durable préparées par 24 ministères et organismes fédéraux; la vérification des principales questions liées à l'environnement et au développement durable, dont l'évaluation environnementale, les changements climatiques et les pêches durables; des études spéciales portant, par exemple, sur les engagements internationaux du Canada et le rendement du secteur public et du secteur privé; et le suivi des pétitions du public sur des questions liées à l'environnement et au développement durable.

6. Bien qu'il n'existe pas de solutions rapides, j'ai la certitude que le gouvernement peut être une force positive pour favoriser le développement durable. Même à l'heure des compressions budgétaires et de la réduction du déficit, les gouvernements doivent assurer un leadership vigoureux et établir une vision claire. Ils doivent aussi montrer qu'ils désirent modifier leur propre comportement et assumer leurs responsabilités en qualité de gardien de notre environnement naturel.

7. Le défi peut être relevé. Ce dont nous avons besoin, c'est la volonté, la discipline et l'engagement de la part de la direction de passer aux actes.

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AU LECTEUR :

Je vous invite à me faire part de vos commentaires et suggestions sur ce rapport, le plan de travail proposé et toute autre question liée à l'environnement et au développement durable. Veuillez adresser vos commentaires à l'adresse suivante :

Monsieur Brian Emmett

Commissaire à l'environnement et au développement durable

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K1A 0G6

ou par courrier électronique à :

rapport-vert@oag-bvg.gc.ca

OFFICE OF THE AUDITOR GENERAL

CANADA

BUREAU DU VÉRIFICATEUR GÉNÉRAL

À l'honorable Président de la Chambre des communes :

Au nom du vérificateur général du Canada, j'ai l'honneur de transmettre par la présente mon rapport à la Chambre des communes pour l'année 1997, qui doit être déposé devant la Chambre conformément aux dispositions du paragraphe 23(3) de la *Loi sur le vérificateur général.*

Le commissaire à l'environnement et au développement durable,

Brian Emmett

OTTAWA, mars 1997

Le Rapport est également disponible sur Internet à www.oag-bvg.gc.ca

Pour obtenir d'autres exemplaires, adressez-vous au :

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CANADA

Rapport du commissaire à l'environnement et au développement durable à la Chambre des communes

1997



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Rapport du commissaire à l'environnement et au développement durable à la Chambre des communes

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Government Publications

CANADA

Report of the

Commissioner of the Environment and Sustainable Development

to the House of Commons

The Commissioner's Observations – 1998

Foreword and Main Points



1998

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Foreword and Main Points



1998

This 1998 Report comprises 8 chapters, including "The Commissioner's Observations" and a Foreword. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.



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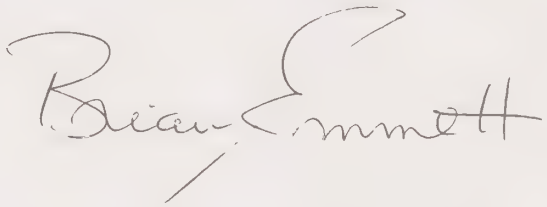
AUDITOR GENERAL OF CANADA
COMMISSIONER OF THE ENVIRONMENT
AND SUSTAINABLE DEVELOPMENT

CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA
COMMISSAIRE À L'ENVIRONNEMENT
ET AU DÉVELOPPEMENT DURABLE

To the Honourable the Speaker of the House of Commons:

On behalf of the Auditor General of Canada, I have the honour to transmit herewith my Report to the House of Commons for the year 1998, to be laid before the House in accordance with the provisions of section 23(3) of the *Auditor General Act*.



Brian Emmett
Commissioner of the Environment
and Sustainable Development

OTTAWA, 26 May 1998

TO THE READER:

I welcome your comments and suggestions on this Report and other issues related to the environment and sustainable development. I can be reached at:

Brian Emmett

The Commissioner of the Environment and Sustainable Development

240 Sparks Street

Ottawa, Ontario

K1A 0G6

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green–report@oag–bvg.gc.ca

Foreword

Report of the Commissioner of the Environment and Sustainable Development – 1998

Foreword

I am pleased to submit my 1998 Report to the House of Commons. This Foreword is followed by "The Commissioner's Observations - 1998" and the Main Points from all of this year's chapters. This volume also contains eight chapters, bound separately:

1. Greening the Government of Canada – Strategies for Sustainable Development

Global Challenges

2. Working Globally - Canada's International Environmental Commitments
3. Responding to Climate Change - Time to Rethink Canada's Implementation Strategy
4. Canada's Biodiversity Clock Is Ticking

Managing for Sustainable Development

5. Expanding Horizons - A Strategic Approach to Sustainable Development
6. Environmental Assessment - A Critical Tool for Sustainable Development
7. Counting the Environment In
8. Performance Measurement for Sustainable Development Strategies

The Commissioner's Observations — 1998

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The Commissioner's Observations

Main Points

1. In June 1997, Canada joined more than 165 countries in a special session of the United Nations General Assembly called to assess progress toward sustainable development since the 1992 Rio Earth Summit. Member states concluded that overall trends are worse today than they were five years ago. Along with our global neighbours, Canada committed to achieving greater measurable progress toward sustainable development during the next five years.

2. For Canada, the stakes are high. Canada is intimately linked — both economically and ecologically — to the rest of the world. The quality of our environment is affected not only by what Canadians do at home but also, increasingly, by activities outside our borders.

3. Canada has made many commitments to the international community. We, in turn, benefit from the commitments made by other nations. A fundamental tenet of international law is that countries will act in good faith to translate their international obligations into meaningful action at home. In a number of areas Canada's actions fall short. For example:

- Climate change is perhaps the most daunting of a new generation of environmental problems testing governments around the world. It involves questions that go to the heart of how we live and how we make our living. Like many countries, Canada has acknowledged that it will not meet its long-standing promise to stabilize greenhouse gas emissions at 1990 levels by the year 2000.
- Canada was one of the first countries to ratify the 1992 *Convention on Biological Diversity*, but has been slow off the mark in implementation. Five years later, an overall implementation plan — an essential tool for co-ordinating efforts across federal, provincial and territorial governments — has not been developed.

4. In these and other areas, the federal government is failing to meet its policy commitments because it is paying too little attention to the management side of the sustainable development equation.

5. Innovative steps are being taken to deal with this government-wide problem. Amendments to the *Auditor General Act* require departments to prepare strategies to turn the concept of sustainable development into concrete action — in their policies, programs and day-to-day operations.

6. In our first review of these strategies, we found that most departments had done the majority of the things they had been asked to do. For the first time, we have a picture of how each department views sustainable development and the actions each intends to take to promote it.

7. However, most departments failed to set the clear targets that could be used internally, by Parliament and by the public, to judge whether or not the strategy is being successfully implemented. And many strategies restate the status quo rather than making new concrete commitments that will better protect our environment and promote sustainable development.

8. The first environmental reports from major corporations, prepared less than a decade ago, had similar weaknesses. But those same companies learned and improved. Our challenge in government is to do the same. Just as "greening" business has proved to be good business, "greening" government will prove to be good government.

Introduction

9. Canadians have been at the forefront of thinking on the interdependence of people and the natural environment. We have achieved a high level of human development and have made progress toward a healthier environment in a number of areas. But important challenges remain — a key challenge being how to turn thoughts and words into concrete action.

10. In this, my second report to the House of Commons, I highlight the need for the federal government to pay more attention to the management side of the sustainable development equation. My staff and I believe that significant improvements can be made in protecting the environment and promoting sustainable development through the application of sound management practices to these issues.

A Renewed Global Commitment to Sustainable Development

11. In 1992, Rio de Janeiro was the site of the United Nations Conference on Environment and Development, more commonly known as the Earth Summit. The Summit's goal was to develop a plan for dealing with environment and development issues today and into the 21st century. More than 30,000 people attended, including representatives from 179 nations. They had high hopes and high expectations.

12. The conference ended with 105 heads of state gathering together to demonstrate their commitment to sustainable development — development in harmony with nature and the needs of both present and future generations. The Earth Summit was the largest meeting of national leaders in history. Those leaders signed the *United Nations Framework Convention on Climate Change* and the *Convention on Biological Diversity*, endorsed the *Rio Declaration* and a set of *Forest Principles*, and adopted *Agenda 21*, a 300-page plan for achieving sustainable development (see Exhibit 1).

13. Five years later, in June 1997, Canada joined more than 165 countries in a special session of the United Nations General Assembly called to assess progress since the Earth Summit, and to set future priorities.

14. In preparing for the session, United Nations staff examined progress across a broad range of sustainable development issues (see Exhibit 2). At the conference, member countries acknowledged that some progress has been made over the last five years. For example:

- growth in world population is slowing;
- food production is rising;
- the majority of people are living longer and healthier lives; and
- environmental quality in some regions is improving.

15. Nevertheless, countries expressed deep concern that the overall trends are worse today than they were in 1992. Some of the key indicators of unsustainable development they cited were:

- rising levels of greenhouse gas emissions, toxic pollution and solid waste;
- overuse of renewable resources, notably fresh water, forests, topsoil and fisheries; and
- the growing number of people living in poverty, and increasing gaps between rich and poor, both within and among countries.

16. Member States committed themselves to ensure that the next comprehensive review in the year 2002 —

Globally, some progress has been made. But overall, sustainable development trends are worse today than they were five years ago.

ten years after Rio — will demonstrate greater measurable progress in achieving sustainable development (see Exhibit 3). Canada was one of those States.

Working Globally and at Home

17. We have a great deal at stake. Canada is intimately linked — both economically and ecologically — to the rest of the world. The quality of our environment is affected not only by what Canadians do at home but also, increasingly, by activities outside our borders.

18. Air and ocean currents carrying pollutants from other countries directly affect the health and well-being of Canadians. Air pollution, the deterioration of the ozone layer, climate change and the depletion of offshore fisheries are all examples of issues that cut across national borders.

19. The Arctic provides a clear example of Canada's vulnerability to the actions of our neighbours. For many Canadians, the Arctic represents a pristine environment. Those who live there are finding that this is not the case. Pollution travels thousands of kilometres from sources in Europe, Asia and North America. Environment Canada's *State of Canada's Environment* report concludes that this long-range transport of contaminants is viewed increasingly as the most significant threat to the environmental quality of the Arctic.

Exhibit 1

The 1992 Rio Earth Summit: What Was Agreed?

Rio Declaration on Environment and Development. The Declaration states that nations have the right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other nations. Through 27 principles, the Declaration calls for, among other things, equity between generations, co-operation among nations, public participation, use of the precautionary principle in decision making and adoption of the "polluter pays" principle.

Agenda 21. Agenda 21 provides a blueprint for making development socially, economically and environmentally sustainable for the 21st century. The 300-page document covers the social and economic dimensions of sustainable development, conservation and management of resources, strengthening the role of major groups and means of implementation.

United Nations Framework Convention on Climate Change. The Convention establishes a framework and a process for agreeing to specific actions to combat climate change. It sets an ultimate objective of stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system. That level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. Organization for Economic Co-operation and Development countries as well as 12 "economies in transition" (Central and Eastern Europe and the former Soviet Union) would aim to return by the year 2000 to the greenhouse gas emission levels they had in 1990.

The *Convention on Biological Diversity.* The purposes of the Convention are to conserve biological species, genetic resources, habitats and ecosystems; to ensure the sustainable use of biological materials; and to provide for the fair and equitable sharing of benefits derived from genetic resources. The Convention includes a requirement that countries adopt regulations to conserve their biological resources, and provide funding, training and the transfer of technology to developing countries to help them implement the Convention.

Statement of Principles on Forests. The statement sets out non-binding principles for the management, conservation and sustainable development of all types of forests. It indicates that forestry resources should be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations, those needs being not only for forest products but also for wildlife habitat, recreation and so on.

Source: Based on information from the United Nations Department of Economic and Social Affairs

Exhibit 2

Five Years After Rio: Where Do We Stand?

Global Sustainable Development Issues

Poverty: Gaps between rich and poor continue to grow, both within and between countries, attributed by some to the effects of globalization. The poorest countries have become even more marginalized. Over 1.1 billion people – 20 percent of the world's population – live in absolute poverty, on the equivalent of less than one dollar a day.

Consumption/Production: Twenty percent of the world's people continue to consume eighty percent of its resources. Some large developing countries are moving rapidly toward higher-consumption lifestyles.

Population: Fertility rates are declining more rapidly than expected in most regions. Latest projections show many developing countries will stabilize their population within the next generation or two. Some countries still face high population growth rates that strain natural resources.

Forests: In spite of a recent downward trend, forest loss continues at an unacceptable rate. A total of 13.7 million hectares of forest – roughly the size of Nepal – are cut or burned each year.

Fresh Water: One third of the world's population lives in countries facing moderate to severe water stress; by 2025 that figure may reach two thirds unless action is taken. One fifth of humanity lack access to safe water and half lack adequate sanitation.

Oceans: Marine pollution – about 80 percent of which is caused by land-based activities – threatens the health and livelihoods of the two thirds of humanity living in coastal areas. Some 60 percent of global fish stocks are overfished or fully fished, requiring urgent action to avoid depletion.

Climate: Global emissions of carbon dioxide and other greenhouse gases continue to rise. A 1995 report by a UN panel of scientists stated that the balance of evidence suggests a "discernible human influence on the global climate".

Energy: Fossil fuel use in industrialized countries is slowly stabilizing, but many polluting emissions are on the increase. Rapid growth in fossil fuel use in many developing countries is leading to severe pollution. Global energy consumption is projected to more than double by 2050. Over 2 billion people, mostly in rural areas in developing countries, do not have access to commercial energy services.

Land: World food production continues to rise, but over 800 million people still suffer from hunger and malnutrition. Use of pesticides and poor farming methods have taken a heavy toll: 300 million hectares of farmland worldwide are now severely degraded and farming has been abandoned. Another 1.2 billion hectares show moderate fertility loss. Desertification (degradation of drylands) affects one quarter of the Earth's land area – 3.6 billion hectares.

Toxics: Toxic chemicals and radioactive wastes continue to pose significant threats to human health and ecosystems. An estimated 3 million tons of toxic and hazardous waste crosses national borders each year.

Biodiversity: The current rate of species extinction and habitat loss is unprecedented. At a moderate estimate, 50,000 plant and animal species are likely to be lost each year over the next decades.

Financing: Despite developed country pledges at the Earth Summit to increase aid for sustainable development, official development assistance declined from an average 0.34 percent of donor country gross national product (GNP) in 1992 to 0.27 percent in 1995. The UN target affirmed at Rio is 0.7 percent of GNP.

Technology Transfer: Developing countries urgently need greater access to environment-friendly technologies in order to develop sustainably. Most green technologies are held by the private sector and access is market-driven.

International Institutions: Better co-ordination and collaboration are needed among the ever-growing number of policy-setting bodies in the area of sustainable development. The ongoing financial crisis affecting many UN agencies and programs has left many hard pressed to carry out both their original mandates and those stemming from Rio.

Participation: The Earth Summit identified nine "major groups" whose active involvement was needed to achieve sustainable development: women; children and youth; indigenous people; non-governmental organizations; local officials such as mayors; workers and trade unions; business and industry; scientists; and farmers.

Source: United Nations Department of Public Information – DPI/SD/1910 – June 1997

20. Countries have recognized this growing global interdependency and have responded by developing a wide range of international environmental agreements. In order to protect our national interests, Canada has been a key force in shaping the international agenda.

21. By entering into these agreements, Canada has made commitments to the international community. We, in turn, benefit from the commitments made by other nations. A fundamental tenet of international law is that countries will act in good faith to translate their international obligations into meaningful action at home.

22. How well are we doing?

The Climate Change Challenge

23. While the Earth's climate has fluctuated dramatically over the history of the planet, since the last ice age 10,000

Exhibit 3

Resolution Adopted by the United Nations General Assembly: Programme for the Further Implementation of Agenda 21

Statement of Commitment – 19 September 1997

1. At the nineteenth special session of the United Nations General Assembly, we – heads of State or Government and other heads of delegations, together with our partners from international institutions and non-governmental organizations – have gathered to review progress achieved over the five years that have passed since the United Nations Conference on Environment and Development and to re-energize our commitment to further action on goals and objectives set out by the Earth Summit.
2. The United Nations Conference on Environment and Development was a landmark event. At that Conference, we launched a new global partnership for sustainable development – a partnership that respects the indivisibility of environmental protection and the development process. It is founded on a global consensus and political commitment at the highest level. Agenda 21, adopted at Rio de Janeiro, addresses the pressing environment and development problems of today and also aims at preparing the world for the challenges of the next century in order to attain the long-term goals of sustainable development.
3. Our focus at this special session has been to accelerate the implementation of Agenda 21 in a comprehensive manner and not to renegotiate its provisions or to be selective in its implementation. We reaffirm that Agenda 21 remains the fundamental programme of action for achieving sustainable development. We reaffirm all the principles contained in the Rio Declaration on Environment and Development and the Forest Principles. We are convinced that the achievement of sustainable development requires the integration of its economic, environmental and social components. We recommit to working together – in the spirit of global partnership – to reinforce our joint efforts to meet equitably the needs of present and future generations.
4. We acknowledge that a number of positive results have been achieved, but we are deeply concerned that the overall trends with respect to sustainable development are worse today than they were in 1992. We emphasize that the implementation of Agenda 21 in a comprehensive manner remains vitally important and is more urgent now than ever.
5. Time is of the essence in meeting the challenges of sustainable development as set out in the Rio Declaration and Agenda 21. To this end, we recommit ourselves to the global partnership established at the United Nations Conference on Environment and Development and to the continuous dialogue and action inspired by the need to achieve a more efficient and equitable world economy, as a means to provide a supportive international climate for achieving environment and development goals. We therefore pledge to continue to work together, in good faith and in the spirit of partnership, to accelerate the implementation of Agenda 21. We invite everyone throughout the world to join us in our common cause.
6. We commit ourselves to ensuring that the next comprehensive review of Agenda 21 in the year 2002 demonstrates greater measurable progress in achieving sustainable development. The present Programme for the Further Implementation of Agenda 21 is our vehicle for achieving that goal. We commit ourselves to fully implementing this Programme.

Source: United Nations Department of Economic and Social Affairs

years ago it has remained quite stable. Greenhouse gases that form naturally in our atmosphere — mainly water vapour, carbon dioxide and methane — have kept the earth about 33 degrees warmer than it would otherwise have been, and thus able to sustain life on Earth.

24. But many scientists have concluded that over the last two centuries — since the beginning of the Industrial Revolution — human actions such as deforestation and burning coal, oil and natural gas have increased the amount of greenhouse gases in the atmosphere and made the climate warmer. This has the potential to change our climate — to cause more heat waves, rainstorms and floods and longer dry spells.

25. Climate change is perhaps the most daunting of a new generation of sustainable development problems that are testing governments around the world. It involves questions of how energy is produced and consumed that go to the heart of how Canadians live and make their living. This economic dimension, coupled with the complexities and uncertainties relating to the science of climate change, provide ample room for vigorous debate about how Canada should respond to this threat.

26. Since 1990, Canada has had a domestic commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000. The 1995 National Action Program on Climate Change is the key program through which federal, provincial and territorial energy and environment ministers have agreed to work together to achieve Canada's stabilization goal. However, by the federal government's own assessment, instead of moving toward stabilization Canada's greenhouse gas emissions are headed in the wrong direction.

27. In my view, implementation of the National Action Program has not been well managed. There is no clear assignment of roles and responsibilities, no national public awareness and education program and no implementation plan.

28. Canada is not alone in falling short of its objectives. Although 166 countries ratified the *United Nations Framework Convention on Climate Change* signed in Rio, only a few are expected to meet the current voluntary target of reducing greenhouse gas emissions to 1990 levels by 2000. The goal of the December 1997 Kyoto Conference was to accelerate the pace of international action under the Convention (see Exhibit 4). For Canada, the Parties set a reduction target of six percent below 1990 levels by 2008–2012. Management failures associated with the current National Action Program must be rectified if we are to meet our Kyoto targets.

Countries are expected to act in good faith to translate their international obligations into meaningful action at home.

Our Biodiversity Clock Is Ticking

29. Biological diversity — or biodiversity — refers to the enormous variety of plant and animal life present in the natural environment. The loss of biological diversity endangers the balance of nature that supports life, and deprives humanity of substances needed to produce new medicines, crop varieties and other products.

30. The Canadian Biodiversity Strategy was developed to meet Canada's commitments under the 1992 *Convention on Biological Diversity.* Canada was one of the first countries to ratify the Convention, but has been slow off the mark in its implementation. Five years later, an overall implementation plan — an essential tool for co-ordinating efforts across federal, provincial and territorial governments — has not been developed.

From Hazardous Waste to the Atlantic and Pacific Fisheries

The federal government needs to pay more attention to the management side of the sustainable development equation.

31. In my 1997 Report to the House of Commons, based on a decade of work by the Auditor General, I identified three key weaknesses in the federal government's management of environmental and sustainable development issues:

- the gap between commitments and concrete action;
- a lack of co-ordination among departments and across jurisdictions; and
- inadequate review of performance and provision of information to Parliament.

32. In addition to the work presented in this Report, over the last year the Auditor General has examined a range of other environmental and sustainable development issues (see Appendix A). Those reports reinforce the theme that the federal government needs to pay more attention to the management side of the sustainable development equation.

33. Part of the problem is that important information for decision making is absent or incomplete. For example:

- We do not know the extent to which Canada is living up to its international obligations to prevent illegal traffic of hazardous waste at the border.
- We do not know the contribution that the set of energy efficiency initiatives now

Exhibit 4

The Kyoto Conference on Climate Change

At Kyoto, countries reached agreement on a legally binding Protocol under which industrialized countries will reduce their collective emissions of greenhouse gases by 5.2% by 2008–12, calculated as an average over those five years. The United Nations estimates that, compared with the emissions levels that would be expected by 2010 without additional action, the Protocol target represents a 30% cut.

The 5.2% reduction includes different targets for different countries.

- Switzerland and many Central and East European states will reduce their emissions by 8%. The European Union will achieve the same 8% target by distributing differing reduction rates to its member states.
- The United States will reduce emissions by 7%.
- Canada, Hungary, Japan, and Poland set a 6% target.
- Russia, New Zealand, and Ukraine are to stabilize their emissions.
- Norway may increase emissions by up to 1%, Australia by up to 8%, and Iceland by 10%.

The agreement grants countries a certain degree of flexibility in how they make and measure their emissions reductions. In particular:

- a "clean development mechanism" will enable industrialized countries to finance emissions-reduction projects in developing countries and receive credit for doing so;
- an international "emissions trading" regime will be established allowing industrialized countries to buy and sell excess emissions credits among themselves; and
- in addition to reductions from various industrial and economic sectors, carbon dioxide emissions from deforestation and carbon dioxide reductions resulting from newly planted trees (which act as carbon "sinks" by absorbing carbon dioxide from the atmosphere) will also be factored into the equation.

The operational details for these schemes must still be elaborated.

The Protocol will be opened for signature for one year from 16 March 1998. It will enter into force after it has been ratified by at least 55 countries representing 55% of the total 1990 emissions from developed countries.

Source: Based on information from the United Nations Information Centre

in place is making, or could make, to achieving Canada's goal for stabilization of greenhouse gas emissions.

- We do not know the full extent of environmental liabilities of the Government of Canada, and the government has not recognized those liabilities in its financial statements because of uncertainties in defining and estimating them.

- We do not know the impact of habitat loss on the Pacific Coast salmon resource.

34. Sometimes clear direction is not established. For example, the Business Plan for the Prairie Farm Rehabilitation Administration does not define clear strategic direction for current and emerging land and water issues that impede rehabilitation of the agricultural Prairie landscape. It does not identify what is to be achieved in which locations, and over what period of time.

35. And sometimes direction may be clear, but implementation falls victim to competing objectives. For example, after spending over $3 billion of new and reallocated funds to support the groundfish industry, including $1.9 billion under The Atlantic Groundfish Strategy, the problems in the industry remain. Another means of addressing the social and cultural issues of coastal communities has to be found.

36. But those challenges can be overcome. We can do better. For example, Canada has met and in some cases exceeded its obligations under the *Montreal Protocol on Substances That Deplete the Ozone Layer*. Canadian achievements also compare favourably with those of other countries, in both influencing and implementing the international agenda.

A New Tool for Greening the Government of Canada — Strategies for Sustainable Development

37. Concern about the federal government's performance in managing issues like these led to the creation in 1995 of a new set of tools to help it move along the sustainable development path. Through amendments to the *Auditor General Act*, departments were required to prepare strategies and action plans to promote sustainable development.

38. I have high expectations for these strategies. The federal government has a tremendous influence on Canada's environmental and sustainable development prospects. It is the largest single enterprise in Canada, it shares responsibility for establishing the legal framework that affects the way we use the environment, and it provides a range of services and programs that contribute to the social, economic and environmental well-being of Canadians.

39. Twenty-eight departments and agencies have now prepared sustainable development strategies and tabled them in the House of Commons — 24 departments that were required by legislation to prepare them, and four other federal organizations that prepared them voluntarily. As Commissioner of the Environment and Sustainable Development, an important part of my job is to assess those strategies, and report my findings to the House of Commons.

40. Through their sustainable development strategies, all departments are being challenged to take environmental, economic and social considerations into account more systematically across the board — in their policies, their programs and their day-to-day operations. Exhibit 5 summarizes current departmental

Departments are being challenged to take environmental, economic and social considerations into account more systematically across the board.

Exhibit 5

Six Key Sustainable Development Strategies

Department	Departmental Objective	Sustainable Development Strategy Themes
Environment Canada	To make sustainable development a reality in Canada by helping present and future generations of Canadians live and prosper in an environment that needs to be respected, protected and conserved.	• To strengthen Environment Canada's ability to meet sustainable development goals. • To be a more effective advocate of sustainable development. • To give Canadians the tools they need to make sound decisions in a changing environment. • To set a good example in the greening of government operations.
Department of Finance	Appropriate policies and sound advice with respect to economic, social and financial conditions and to the government's agenda; responsible administration of international financial obligations and subscriptions; economical financing of domestic coinage costs; responsible financing of special projects; effective and efficient corporate administration.	• Integrating the economy and the environment. • Building the future. • Participating in the global economy. • Greening operations.
Foreign Affairs and International Trade	To act for all Canadians to enhance prosperity, employment and security and work toward a peaceful world by the promotion of Canadian culture and values.	• Economic growth and prosperity. • Building peace and security. • Canadian values and culture. • Greening operations.
Industry Canada	To promote international competitiveness and excellence in industry, science and technology in all parts of Canada, to promote regional economic development in Ontario, to assist Aboriginal people to realize their economic potential, to promote fair and efficient operation of the marketplace in Canada, and to establish the rules of the marketplace and ensure that they are effectively implemented and enforced.	• Foster a marketplace climate in Canada that promotes sustainable development. • Enhance the ability of Canadian firms to develop and use innovative technologies and tools that contribute to sustainable development. • Encourage trade and investment flows that contribute to sustainable development in Canada and abroad. • Continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations that contribute to sustainable development.
Natural Resources Canada	To advance the development of Canada's economy by providing expert scientific and economic knowledge to Canadians, and by promoting the sustainable development and use of Canada's natural resources and the competitiveness of the energy, forest, minerals and metals and geomatics industries.	• Making better decisions. • Enhancing long-term social and economic benefits. • Maintaining a healthy and safe environment. • Putting our own house in order.

Exhibit 5 (cont'd)

Department	Departmental Objective	Sustainable Development Strategy Themes
Public Works and Government Services Canada	To provide the best value for taxpayers' dollars in common and central services delivered to departments, agencies and other clients with due regard for the important government values of prudence, probity and transparency.	• To apply sound environmental principles to Public Works and Government Services' common service business lines and internal operations. • To support sustainable development through continuous improvement in: – procurement; – fleet management; – waste management; – water conservation; – energy efficiency; and – land use management.

Source: Departmental objectives are taken from the 1998–99 Estimates; Sustainable Development Strategy themes are taken from departmental strategies.

objectives, and the themes of six key sustainable development strategies.

41. In our first review of departmental strategies, we asked a simple question: "Did departments do what they were asked to do?" We found that most departments had done most of what they had been asked to do. They described their current mandates and activities, consulted stakeholders and established goals and objectives.

42. For the first time, we have a picture of how each department views sustainable development and the actions each department plans to take to promote it. Preparing their strategies has also raised awareness of sustainable development issues within departments.

43. However, our review also revealed weaknesses in the strategies, two of them fundamental:

- Almost all departments failed to set clear targets that they, parliamentarians and the public could use to judge whether or not the strategy is being successfully implemented.

- Many of the strategies appear to be more a restatement of the status quo than a commitment to change to better protect our environment and promote sustainable development.

44. I believe that the first weakness needs to be dealt with expeditiously. The Auditor General has often remarked that good information is critical for accountability, whether parliamentarians are voting on annual spending, reviewing future years' priorities and plans or scrutinizing past performance. As voters, individual Canadians also need good information to hold government to account. Departments need good information to judge whether their strategies are working and when corrective action may be required. And I need good information in order to meet my responsibilities to Parliament to assess and report on departmental progress.

45. The second weakness — that departmental strategies tended to focus more on past accomplishments and the status quo rather than on change and future directions — will need to be dealt with over time. The strategies will be updated by December 2000 — I will be expecting departments to place more emphasis on what they will do differently to promote sustainable development. And I am confident that there will be a

Sustainable development will not be achieved through a one-time effort. We need a commitment to learning, improvement and innovation.

significant improvement in the quality of the next round of strategies.

Learning from Others, and from Each Other

46. Sustainable development has often been described as a learning process. The federal government's *A Guide to Green Government* notes:

> Sustainable development will not be achieved through a one-time effort. A step-by-step approach based on continuous, incremental improvement is required to make measurable progress.

47. I agree. Public sector organizations are not the only ones struggling with how best to build environmental and sustainable development considerations into the way they do business. In the private sector, there has been a significant change over time in thinking about the relationship between a business's shareholder value and the environment. The federal government can learn from the experience of leading private sector organizations.

48. In his 1997 article in the *Harvard Business Review* — "Beyond Greening: Strategies for a Sustainable World" — Professor Stuart Hart put it this way:

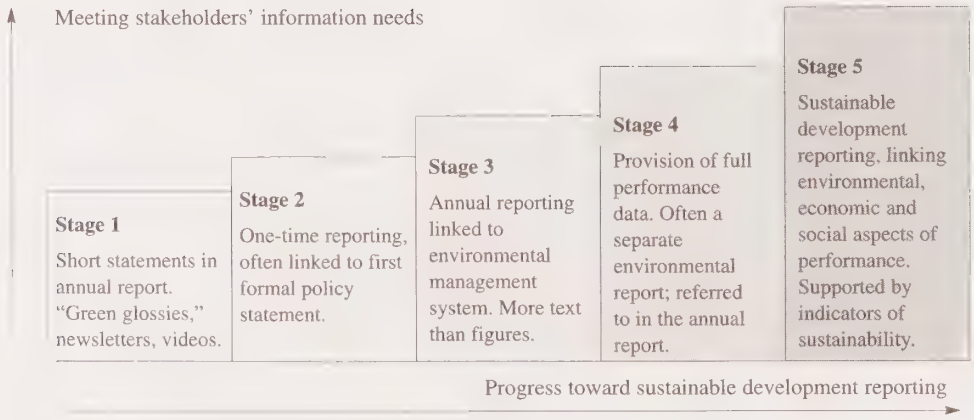
> Whereas yesterday's businesses were often oblivious to their negative impact on the environment and today's businesses strive for zero impact, tomorrow's businesses must learn to make a positive impact.

Governments face the same challenge

49. In response to pressure from regulators, customers, suppliers, environmental groups, and the public at large, corporate managers are putting in place the tools to help them reduce their environmental impact and resource consumption. Trends in corporate environmental reporting and the establishment of environmental management systems are important indicators of the changes under way in the private sector.

Exhibit 6

Evolution Toward Sustainable Development Reporting



Source: Reporting on Environmental Performance. The Canadian Institute of Chartered Accountants, 1994

50. Exhibit 6 illustrates the evolution of corporate environmental and sustainable development reporting. The quantity and quality of the underlying analysis and information provided tends to improve as organizations move along the continuum from "green glossies" to sustainable development reports.

51. Like some of the first sustainable development strategies, initial corporate reports tended to focus narrowly on the positive aspects of the organization's environmental performance. But as organizations gained experience and worked with a management system that supported their strategies, the reports provided broader and deeper coverage of the issues facing the organizations and the way they were dealing with those issues.

52. International surveys of corporate environmental reporting done for the United Nations Environment Programme by SustainAbility Ltd. show major improvements in the quality of reporting over time. According to SustainAbility Ltd., today the best corporate reports:

- cover all three dimensions of sustainable development — economic, social and environmental;
- highlight the key issues directly linked to the company's core business, and priorities in dealing with them; and
- present performance indicators with targets that are specific, measurable, attainable and verified.

53. Those are the same characteristics we hope to find in a sustainable development strategy prepared by a federal government department. Today, most fall short of those high standards. By 2000, I expect departments to have narrowed that gap considerably.

54. Closing the gap will require departments to work together and to learn from each other. There is a steep learning curve associated with preparing and implementing sustainable development strategies, and departments are at different stages along it. They can benefit from sharing experiences, and by co-operating to solve common problems.

55. Throughout the sustainable development strategy process, Environment Canada has taken the lead in establishing a range of mechanisms to promote the sharing of information and experiences among departments. The 28 sustainable development strategies illustrate the range of common interests and common challenges.

Most departmental strategies fall short of best practices in the private sector.

Next Steps: Our Work Plan

56. My staff and I have an important contribution to make to this process of "learning and improving". In my first report, I identified four objectives to guide our work over the coming years:

- To provide objective, independent analysis and recommendations to members of Parliament to help them examine the government's environmental and sustainable development activities and hold it to account.
- To work with federal departments and agencies to help strengthen their capacity to manage environmental and sustainable development issues by promoting the adoption of best management practices.
- To address both environmental protection and sustainable development, by emphasizing better decision making within the federal government. In the shorter term, particular attention will be paid to the federal government's efforts to protect the environment.
- To continue to focus on key weaknesses in the federal government's management of sustainable development issues identified in previous work by the Office of the Auditor General, and on the success or failure of departments in dealing with them. These weaknesses include the implementation gap; a lack of co-ordination and integration among

My staff and I have an important contribution to make to the process of "learning and improving".

departments and across jurisdictions; and inadequate performance review and information to Parliament.

57. Those objectives remain valid. However, while the initial focus of our work has been on the federal government's efforts to protect the environment, it is time to broaden our perspective to include both the economic and the social dimensions of sustainable development.

58. Exhibit 7 summarizes the main elements of our work plan for the next two years.

Review of sustainable development strategies

59. As I have indicated, 28 federal government departments and agencies

Exhibit 7

Environment and Sustainable Development Issues: Our Work Plan

Task	In 1998–1999	In 1999–2000
Departmental sustainable development strategies	Conduct audits of: • Sustainable Development Strategy Consultations Process • First-Year Strategy Implementation Conduct studies of: • The Social, Economic and Environmental Dimensions of Sustainable Development	Issue a report on the Commissioner's expectations for strategy updates Conduct audits of: • Second-Year Strategy Implementation • Interdepartmental Co-ordination
Integrating the fourth "E" across the Office of the Auditor General (Has money been spent with due regard to economy, efficiency, effectiveness and environmental effects of those expenditures?)	Conduct audits of: • Management of Toxic Substances • Effectiveness of Bilateral Environmental Agreements • International Commitments and the Arctic • Managing Atlantic Shellfish in a Sustainable Manner • Progress on the Science and Technology Strategy • National Energy Board Follow up previous audits of: • Environmental Stewardship • Contaminated Sites: Costs and Liabilities Implement sustainable development strategy for the Office of the Auditor General	Conduct audits of: • Management of Hazardous Waste at National Defence • Pacific Salmon – Sustainability of the Fisheries • Level Playing Field in Energy Sources • Environmental Industries Strategy Follow up previous audits of: • Transboundary Movement of Hazardous Waste • Ozone Layer Protection • Federal Radioactive Waste Management
Special studies	Conduct studies of: • Managing for Sustainable Development • Phase 2 of Accounting for Sustainable Development	1999–2000 studies program to be determined
Petitions	Monitor on behalf of the Auditor General	Monitor on behalf of the Auditor General

prepared their first sustainable development strategies and tabled them in the House of Commons. Over the next two years, departments face three main challenges:

1. **Implementing their strategies.** Departments have established their objectives and identified the actions they need to take in order to meet them. We will report on the extent to which departments did what they said they would do.

2. **Establishing clear and measurable targets.** We have recommended that departments establish a clear set of benchmarks to judge whether the strategies are being successfully implemented, and present them to the House of Commons in the spring of 1999. I know this will be a challenge for departments. We will assist them in the development of key indicators, and will monitor and report performance against them.

3. **Preparing for the strategy update.** Departments are required to update their strategies at least every three years, with the first update due by December 2000. Before then, I will issue a special report setting out my expectations for the strategy update. That report will present the criteria my staff and I will use to assess the updated strategies.

60. Over the next year, we will also look at two important sustainable development strategy issues.

- **The consultation process.** As part of strategy preparations, departments were asked to obtain the perspectives of clients, partners and stakeholders on departmental priorities for sustainable development and how to achieve them. We will examine the processes departments used, and compare them with established practices, departmental expectations and the expectations of clients.

- **The social, economic and environmental dimensions of sustainable development.** The strategies provide a picture of how each department currently views sustainable development and the actions each will take to promote it. In our initial assessment of the strategies, we noted that they focussed more on economic and environmental issues than on the social dimension. We will present a more complete assessment of this issue.

Integrating the fourth "E" into the work of the Office

61. The Auditor General's own sustainable development strategy indicates how the Office will incorporate environment and sustainable development into our audit work, into the management of our day-to-day operations and into our human resources practices. The Office's objective is to make sustainable development integral to what we do and how we do it.

The Office's objective is to make sustainable development integral to what we do and how we do it.

62. Consistent with that commitment, over the last year the Auditor General conducted a range of audits of issues with an important environmental and sustainable development component (see Appendix A). Over the next year, we will be looking at other issues, including:

- **Management of toxic substances.** The audit will focus on the policy and regulatory management of toxic substances by federal departments, including Environment Canada and Health Canada. Specifically, we will examine how federal departments identify and prioritize substances of potential concern, whether federal programs for managing toxic substances are leading to sustainable risk management decisions, and whether there is sufficient capacity to make science-based decisions.

- **Effectiveness of bilateral environmental agreements.** We will focus on the effectiveness of the bilateral environmental agreements between the federal and provincial governments, such

as those under the *Canadian Environmental Protection Act* and the *Fisheries Act*.

- **International commitments and the Arctic.** Last year we began an ongoing work program to assess how Canada is doing at meeting its international environmental commitments (see Chapter 2, Working Globally — Canada's International Environmental Commitments). This year, we will examine the transboundary issues and regime of international agreements affecting Canada's north.

- **Managing Atlantic shellfish in a sustainable manner.** This audit will examine the Department of Fisheries and Oceans management practices in the Atlantic shellfish industry. We will examine whether those practices contribute to a biologically sustainable resource and the sustainable use of the resource. We will also examine how the Department shares responsibility with industry and manages activities designed to fulfil the Department's strategy of making fisheries economically viable over time.

- **Progress on the Science and Technology Strategy.** As part of the continuing review of the federal Science and Technology Strategy, we will examine whether the management of climate change science reflects the principal commitments of the strategy.

- **National Energy Board.** The National Energy Board is responsible for ensuring environmental protection during the planning, construction, operation, maintenance and abandonment of interprovincial and international pipelines and power lines. Our audit will include observations on some aspects of the National Energy Board's responsibility as it relates to environmental matters.

63. We will also be following up on previous work on environmental stewardship and contaminated sites to determine how departments have responded to our recommendations.

Studies of special interest to Parliament

64. Through special studies, we are able to step outside an audit framework and work directly with departments to help them strengthen their capacity to manage environmental and sustainable development issues. Over the next year, we will be conducting studies in two areas.

- **Managing for sustainable development.** Chapter 5, Expanding Horizons – A Strategic Approach to Sustainable Development, examines the management approaches of organizations recognized for their progress toward sustainable development. We found that effective strategies involve the application of sound management practices, but that non-traditional techniques were also being applied. Over the next year, we will continue to identify opportunities for strengthening strategy development and implementation capacity within the federal government.

- **Accounting for sustainable development.** Chapter 7, Counting the Environment In, describes the evolving accounting and reporting needs of organizations. Next year, we will investigate emerging practices for integrating environmental and social considerations into program and policy decisions. We will also work with departments on the development of measures of the Government of Canada's environmental performance in the following areas: green procurement; waste management; water usage; energy use in federal buildings; the operation of motor vehicle fleets; and land use management.

Involving Canadians: The Petition Process

The petition process

65. The 1995 amendments to the *Auditor General Act* also created a petition process. The process provides Canadians with a vehicle to register their concerns about specific environmental and sustainable development issues that fall within the responsibility of the federal government, and to obtain a response to those concerns.

66. Under the process, a Canadian resident can send a written petition to the Auditor General. The petition is then sent to the appropriate federal minister for response. The minister has 120 days to respond to the petitioner.

Status of petitions received

67. As of 31 March 1998, 10 petitions had been received and sent to ministers for response. The petitions covered a number of issues, including environmental assessment, ozone depletion, the Multilateral Agreement on Investment and the Canada-wide Accord on Environmental Harmonization. Both individuals and organizations submitted petitions. Appendix C provides information on the nature and status of petitions received.

68. All but one of the petitions were responded to within the required time period. The response to the petition concerning the Canada Infrastructure Works Program was three months late. Two other petitions, received toward the end of the fiscal year, are pending.

Next steps

69. I intend to ensure that the petition process is both accessible to Canadians and responsive to their needs. Over the next year, I plan to survey both petitioners and departments concerning their satisfaction with the process and their suggestions for improving it.

70. Everyone has a role to play in helping to move Canada along the sustainable development path. The petition process is one way Canadians can make their views known to the federal government. I encourage Canadians to make use of it.

Conclusion

71. Organizations in both the private and public sectors are under increased pressure to improve their environmental performance and to contribute to sustainable development. That pressure has come from a wide range of sources — employees, investors, customers, communities, environmental groups, governments — and from the public at large.

72. In the private sector, as organizations have responded to the pressure to improve their environmental performance, they have begun to re-examine their operational processes and the products and services they provide. Many have discovered that a well-formulated environmental or sustainable development strategy can lead to a number of advantages for the organization — better quality, reduced costs, improved image and relations with stakeholders. For those companies, environmental protection has shifted from a cost of doing business to a strategic opportunity.

73. Our challenge is to help government agencies make the same transition — both in their thinking and in their actions. This is not a challenge of policy alone or of management alone. It is a challenge of both — good policy supported by effective management. But it does mean paying more attention to the management side of the sustainable development equation. Just as "greening" business is proving to be good business, I believe "greening" government will prove to be good government.

Individual Canadians have an important role to play.

I believe "green" government is an important part of good government.

Appendix A

Environmental and Sustainable Development Work by the Office of the Auditor General, 1997

Reference	Key Conclusions
Control of the Transboundary Movement of Hazardous Waste April 1997, Chapter 4	As a result of the significant gaps in the areas of prevention, detection and enforcement and the limited facilities to physically control exports of hazardous waste at the border, Canada is not in a position to know the extent to which it is living up to its international obligations with regard to preventing illegal traffic at the border. (para. 4.107)
Natural Resources Canada – Energy Efficiency April 1997, Chapter 10	Improving energy efficiency is a key element in enabling the federal government to achieve its commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000. Information is not available on the contribution that is being made, or that could be made, to Canada's stabilization goal by the set of energy efficiency initiatives. (para. 10.96, 97)
Observations by the Auditor General on the Financial Statements of the Government of Canada Accounting for Environmental Liabilities and Contingencies October 2, 1997 Public Accounts of Canada, 1997 Volume 1	Environmental liabilities of the government are likely quite significant. However, the government has not recognized such liabilities in its financial statements because of uncertainties in defining and estimating them. I continue to hold the view that steps can and should be taken now to provide a more complete picture of environmental liabilities and costs in the financial statements. Since 1994–95, the government has reported potential environmental liabilities of $2.8 billion (an incomplete estimate) in the note to the financial statements. (page 1.28)
Atlantic Groundfish Fisheries October 1997, Chapters 14, 15 and 16	After spending over $3 billion of new and reallocated funds to support the industry, including $1.9 billion under The Atlantic Groundfish Strategy, the problems in the groundfish industry remain. The fisheries management practices need to be improved to ensure the sustainability of the resource base; dependency continues on the fishery to provide access to federal income support programs; and few employment alternatives exist for people in coastal communities. The problem is compounded by the fact that the majority of the people in these communities have education levels that limit alternative choices of employment. (para. 14.95)
Agriculture: Prairie Farm Rehabilitation Administration December 1997, Chapter 24	We found that the 1997–98 PFRA Business Plan is deficient in many key areas. It does not define clear strategic direction for current and emerging land and water issues that impede rehabilitation of the agricultural Prairie landscape. It does not identify what is to be achieved in which locations, and over what period of time. Nor does the Plan indicate how funds and resources will be allocated to achieve the strategic objectives in view of increasing and divergent demands. (para. 24.18)
Environment Canada: Ozone Depletion December 1997, Chapter 27	Canada, through the leadership of Environment Canada and in collaboration with other federal departments, provincial governments, industry and other stakeholders, has met and in some cases exceeded its obligations under the *Montreal Protocol*. Canadian achievements compare favourably with those of other countries, in both influencing and implementing the international agenda. Canada has also made substantial progress on its domestic policy commitments. (para. 27.131)
Fisheries and Oceans: Pacific Salmon Management: The Sustainability of the Resource Base December 1997, Chapter 28	Canada's ability to sustain the Pacific salmon resource at the present level and diversity is questionable given the various factors influencing salmon survival, many of which are beyond its control. While Fisheries and Oceans has built up major salmon stocks, others are declining and many are considered threatened. There is evidence that habitat loss is contributing to these declines. However, no overall status report on salmon habitat is available to assess the impact of habitat loss on the resource. (para. 28.1)

Appendix A (cont'd)

Reference	Key Conclusions
Follow-up to Earlier Audits December 1997, Chapter 35:	
Emergency Preparedness in the Federal Government – Accidents Involving Oil and Chemicals – 1992, Chapter 24	Five years after we noted our concerns, much remains to be done to ensure that Canada is prepared for major oil and chemical spills emergencies. (para. 35.2)
Environment Canada – Managing the Legacy of Hazardous Wastes – 1995, Chapter 2	Parliament continues to need adequate information on the risks and clean-up costs of federal contaminated sites. While some progress has been made, environmental liabilities are likely quite substantial and could materially affect the government's reported financial condition. (para. 35.2)
Federal Radioactive Waste Management – 1995, Chapter 3	Natural Resources Canada has taken steps in the right direction, such as the development of a policy framework for radioactive waste. However, much remains to be done to find long-term solutions for Canada's nuclear fuel waste, low-level radioactive wastes and uranium mine and mill tailings. (para. 35.1)
Office of the Auditor General: Sustainable Development Strategy December 1997, Chapter 37	The main influence that our sustainable development strategy will have on the Office will be that we will approach our audit work in a more integrated and comprehensive manner. (para. 37.68)

Appendix B

How to Access Departmental Sustainable Development Strategies

Electronically, through the Internet

Most departments have placed their sustainable development strategies on the Internet. Through the Auditor General of Canada's Internet site, we have established links to the departmental strategies.

To obtain access to them:

Go to: **http://www.oag–bvg.gc.ca**

Click on: **The Commissioner of the Environment and Sustainable Development**

Click on: **Sustainable Development Strategies**

Click on: **the department of your choice**

In printed form, through the departments

Printed versions of the sustainable development strategies are available from each department's communications group.

To obtain a copy:

Call Reference Canada at 1–800–667–3355 and ask for the telephone number for the communications group of the department of your choice.

Call that number and ask for a copy of the department's sustainable development strategy.

Appendix C

Summary of Petitions Received

Subject of Petition	Petitioner	Federal Department	Date of Petition	Date Response Received	Response
1. **Environmental Assessment.** The petitioner raises several concerns about the findings and proposed mitigation measures in the environmental assessment screening report done for the Osprey Ridge Golf Course under the Canada/Nova Scotia Infrastructure Works Program.	The Ecoforestry School in the Maritimes	Atlantic Canada Opportunities Agency	October 2, 1996	February 7, 1997	The Minister indicated that the Agency followed up on ensuring that the project proponent understood the need to take mitigation measures, and withheld funds to ensure that environmental undertakings were carried out.
2. **Transportation Policy.** The petitioner requests the government to devise a master plan for transportation to ensure the sustainability of Canada's transportation system.	Rail Ways to the Future Committee	Transport Canada	March 6, 1997	July 3, 1997	The Minister responded that the federal government is moving toward economic deregulation and commercialization of facilities such as ports, airports and air navigation services. A master plan would be inconsistent with this approach.
3. **Canada Infrastructure Works Program.** The petitioner raised concerns regarding the environmental impacts of the road construction and upgrading component of the Canada Infrastructure Works Program.	Transport 2000 Ontario Inc.	Treasury Board Secretariat	March 9, 1997	October 24, 1997	The Minister indicated that the roads and highways component of the program represented 28.1% of Phase 1 funding and that the vast majority of the work involved repair of existing roadways, often in conjunction with water and sewer rehabilitation projects. Part of Phase 2 funding went to public transit projects. Infrastructure projects under the program are subject to environmental reviews under the *Canadian Environmental Assessment Act* to ensure that principles of sustainable development are respected.
4. **Environmental Assessment.** The petitioner alleged that the construction of a hydro line from Golden to Field, British Columbia was carried out in violation of federal regulations and policies.	Mr. Graeme Pole	Canadian Heritage	March 3, 1997	June 25, 1997	The Minister stated that the environmental screening was carried out in accordance with all requirements under the *Canadian Environmental Assessment Act* and concluded that impacts were insignificant or mitigable with known technology. The Department found the hydro line to be a more environmentally acceptable and cost-efficient method of providing power to Field than other alternatives investigated.

Appendix C (cont'd)

Subject of Petition	Petitioner	Federal Department	Date of Petition	Date Response Received	Response
5. **Oil and Gas Leaks and Emissions.** The petitioner alleges that the government is not dealing with regulatory violations in Alberta with respect to sour gas leaks and emissions.	Reverend W.A. Ludwig	Natural Resources Canada	April 9, 1997	May 8, 1997	The Minister responded that the alleged violations were not within federal jurisdiction but rather within the jurisdiction of the Alberta Energy Board and provincial authorities.
6. **Canadian Mining Regulations.** The petitioner alleges that the current open access system regarding mineral rights in the Northwest Territories is inconsistent with the notion of sustainable development.	Canadian Arctic Resources Committee	Indian Affairs and Northern Development Canada	April 16, 1997	Sept 2, 1997	The Minister replied that there is a multitude of existing legislation that regulates the mining industry in the Northwest Territories in a sustainable manner. The licence staking regime supported by the overall regulatory framework is consistent with the principles of sustainable development. The Minister further indicated that the current regime in the Northwest Territories is changing with the settlement of comprehensive land claims and the establishment of new institutions for land administration and resource management. Any comprehensive review of existing resource management legislation including the Canada Mining Regulations would be more appropriate after land claims are settled.
7. **Resource Management.** The petitioner alleges that the program to divest the Atlantic salmon hatcheries to private interests fails to take into account the necessity for Fisheries and Oceans to fulfil its conservation role in the Atlantic Provinces and fails to recognize that certain river-specific genetic stocks continue to be threatened or endangered by pollution and other factors. The petitioner also requests that the government formulate a national policy for both East and West Coast fish hatchery programs in Canada.	Queen's County Fish and Game Association	Fisheries and Oceans Canada	June 25, 1997	October 1, 1997	The Minister responded that severe departmental budget cuts have led the Department to decide to divest the Maritime provinces hatcheries, given the closure of most commercial salmon fisheries and the Minister's opinion that "in-river" conservation measures render additional stocking activities unnecessary.

Appendix C (cont'd)

Subject of Petition	Petitioner	Federal Department	Date of Petition	Date Response Received	Response
8. **Effects of ozone depletion.** The petitioner has requested information on the actions government departments will take over the next five years to protect the health and livelihoods of Canadians from the effects of ozone depletion. In particular, the petitioner requests specific budgeted commitments with targets and time frames for conduct of research on the health and environmental impacts of increased UV radiation and on the nature of protective measures to be taken. The petitioner also seeks information on Canada's continued commitment to the development of policy and implementation measures under the *Montreal Protocol* in developing countries. In addition, the petitioner requests information on enforcement of laws prohibiting the import and export of ozone-depleting substances.	Friends of the Earth	Fisheries and Oceans Canada, Environment Canada, Health Canada, Natural Resources Canada, Agriculture and Agri-Food Canada	Sept 8, 1997	Jan 19, 1998 Mar. 23, 1998	The Minister of Fisheries and Oceans indicated that the Department has commissioned a study to provide baseline information on UV-B radiation and its effects on commercially important crustaceans and fishes. Fisheries and Oceans also collaborates under a Memorandum of Understanding with Environment Canada, Natural Resources Canada and Agriculture and Agri-Food Canada for co-ordination in the use of science and technology for sustainable development. Agriculture and Agri-Food Canada provided information on research on impacts on crop production of UV-B radiation carried out until the end of Green Plan funding in 1997. The Department is actively investigating alternatives to methyl bromide, the ozone-depleting substance used in a significant way by the agricultural community. These activities will continue until 2005, when methyl bromide is targeted for 100% phase-out of use by developed countries.
9. **Multilateral Agreement on Investment.** The petitioner expresses concerns about the uncertain effects of the Multilateral Agreement on Investment on social equity, environmental protection, public health protection and sustainable development; and asks for clarification of the terms of reference and objectives of the agreement with respect to these issues.	Canadian Association of Physicians for the Environment	Environment Canada Foreign Affairs and International Trade	Jan 14, 1998	Pending	

Appendix C (cont'd)

Subject of Petition	Petitioner	Federal Department	Date of Petition	Date Response Received	Response
10. **Harmonization Accord.** The petitioner requested the Minister of the Environment not to sign the Canada-wide Accord on Environmental Harmonization. The petitioner alleges the accord would lead to the devolution of federal roles and responsibilities for the environment to the provinces and hence be inconsistent with sustainable development.	Canadian Environmental Law Association	Environment Canada	Jan 22, 1998	Pending	

Appendix D

Panel of Advisors to the Commissioner of the Environment and Sustainable Development

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Senior Vice President, Environment, Resources and Technology
Canadian Pulp and Paper Association, Montreal

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Main Points

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Greening the Government of Canada — Strategies for Sustainable Development

Chapter 1 – Main Points

1.1 In 1995, legislation was enacted to help strengthen the federal government's performance in protecting the environment and promoting sustainable development. Through amendments to the *Auditor General Act*, ministers were required to have sustainable development strategies prepared for their departments.

1.2 The sustainable development strategies were intended to help departments broaden their perspective on what they do and how they do it — to more systematically take environmental, economic and social considerations into account in their policies, programs and operations. The strategies were meant to help turn sustainable development from words into action. The Commissioner of the Environment and Sustainable Development was appointed to help parliamentarians assess them.

1.3 Preparation of a sustainable development strategy is a systematic process that:

- begins with an identification of what a department does and how it does it;
- assesses those activities in terms of their sustainable development impacts;
- seeks the views of clients, partners and other stakeholders on priorities;
- establishes goals, objectives and benchmarks for measuring progress;
- presents an action plan to translate those goals into concrete results; and
- concludes with an explanation of how the department will measure and report on its performance.

1.4 In our first review of the departmental sustainable development strategies, we found that most departments prepared a strategy consistent with the majority of those basic requirements. For the first time, therefore, we have a picture of how each government department currently views sustainable development and of the actions each one intends to take to promote it. Moreover, strategy preparation has increased awareness of sustainable development issues within those departments.

1.5 However, our review of the strategies revealed a number of weaknesses, two of them fundamental.

- Almost all departments failed to establish the clear and measurable targets that are key to the success or failure of the sustainable development strategy process. As a consequence, departments, parliamentarians and the public lack the benchmarks they need to judge whether the strategies are being successfully implemented, or to determine when corrective action may be required.
- Many strategies appear to represent less a commitment to change in order to promote sustainable development than a restatement of the status quo. Those strategies tend to focus more on past accomplishments than future directions. Less than one half identify specific policy, program, legislative, regulatory or operational changes that would be made to implement the strategy.

Main Points (cont'd)

1.6 The lack of benchmarks needs to be dealt with quickly. We believe that departments need to establish a clear set of targets and present them to the House of Commons in the spring of 1999.

1.7 By 15 December 2000, departments are expected to present their second sustainable development strategies. Building on the experience gained from the first round of strategy preparation, we will be looking for a significant improvement in strategy quality in the second round. In particular, we expect departments to focus more on what they will do differently to promote sustainable development.

Working Globally — Canada's International Environmental Commitments

Chapter 2 – Main Points

2.1 The quality of Canada's environment is affected not only by what Canadians do at home but also by activities outside Canada's borders. Air pollution, the deterioration of the ozone layer, climate change, the depletion of offshore fisheries resources and ocean pollution are all examples of environmental issues that cut across national borders.

2.2 Countries have increasingly recognized this environmental interdependency and have responded by developing a wide range of international environmental agreements. Canada has participated actively in negotiating these agreements and needs to continue doing so in order to protect its national interests.

2.3 Canada has often played a key role in shaping the international environmental agenda, and is a party to a significant number of international agreements dealing with environmental and sustainable development issues. Canada devotes considerable time and effort to developing these agreements. For each agreement, there is a timetable of international work and meetings, as well as a separate domestic process that Canada follows to prepare its negotiating position.

2.4 In entering into these agreements, Canada has made commitments to the international community. Canada, in turn, stands to benefit from the environmental commitments made by the international community.

2.5 A fundamental tenet of international law is that countries will act in good faith to carry out their international obligations. In some cases, this means that they must translate these obligations into meaningful action at home. In other cases, the commitments require countries to undertake co-operative efforts at an international level with other parties to international agreements.

2.6 However, Canada does not systematically track the implementation of its international environmental commitments. As a consequence, Canada does not have an overall picture of how good a job it is doing at meeting the obligations it has undertaken: where it has been successful; what gaps remain; what lessons have been learned. This lack of accessible information is a significant barrier to Parliament's oversight of the implementation of Canada's current and future commitments in this area.

2.7 Having and using adequate information is key to effective management of our commitments. Working with departments, this Office is constructing a publicly accessible data base of Canada's international environmental commitments in an effort to improve accountability by the government to Parliament for their implementation. We will also continue in-depth analysis of the extent to which selected individual agreements are put into effect. We expect, however, that Foreign Affairs and International Trade and Environment Canada will work with other departments on a broader assessment of the extent to which Canada is living up to its obligations under these agreements.

Responding to Climate Change — Time to Rethink Canada's Implementation Strategy

Chapter 3 – Main Points

3.1 Climate change is perhaps the most daunting of a new generation of environmental problems that are testing governments around the world. Canada's position is that some degree of climate change is inevitable. The federal government has concluded that the threat of climate change is real and that the risks have to be managed. It believes that the potential environmental, economic and human costs are simply too high not to take immediate, precautionary action.

3.2 Responding to climate change falls into an area of shared jurisdiction and requires clear agreement on the roles and responsibilities of all levels of government. It also requires that their efforts be integrated and involve industry, non-governmental organizations and individual Canadians.

3.3 Since 1990, Canada has had a domestic policy commitment to stabilize its greenhouse gas emissions at 1990 levels by the year 2000. In 1995, the federal, provincial and territorial ministers of energy and the environment approved the National Action Program on Climate Change (NAPCC) to provide strategic direction to achieve the stabilization goal. However, by the federal government's own assessment, instead of moving toward stabilization at 1990 levels, Canada's greenhouse gas emissions are headed in the wrong direction.

3.4 In our opinion, the NAPCC has been inadequately implemented. Many of the key elements necessary to manage the implementation of Canada's response to climate change are missing or incomplete. For example, there is no clear assignment of roles and responsibilities, no national communication program, no implementation plan, limited provision for regular, results-based monitoring of progress and no consolidated summary-level reporting to Parliament. Our audit identified several recommendations to address these concerns. These recommendations are also relevant to meeting any new climate change commitments that Canada may set, and thus serve as lessons to be learned for the future.

3.5 We believe that strong federal leadership is required in a number of areas to build upon the strategic direction of the NAPCC. The federal government has a responsibility to lead the nation in developing a realistic, broad-based and cost-effective response to climate change that minimizes any negative impact and maximizes any positive impact on Canada's economy. The implementation approach needs to be substantially rethought, with an effective management structure put in place.

Canada's Biodiversity Clock Is Ticking

Chapter 4 – Main Points

4.1 Biodiversity is the variety of life on Earth. It includes all life forms and their associated biological systems. The conservation and sustainable use of biodiversity is a highly complex issue. Attaining and promoting a better understanding of biodiversity conservation requires a concerted and integrated effort on behalf of all jurisdictions, sectors and interests in Canada.

4.2 Jurisdiction over environmental matters like biodiversity is shared between the federal and provincial governments. Dialogue at relevant ministerial councils is necessary to ensure that biodiversity issues are addressed across Canada. We were told that biodiversity needs to figure more prominently and frequently in the agendas of the fisheries, forestry, agriculture, wildlife, parks and environment ministerial councils.

4.3 Canada was the first industrialized country to ratify the *United Nations Convention on Biological Diversity*. Canada's primary response to the Convention has been the development of the Canadian Biodiversity Strategy. The Strategy is an important first step in providing a national framework for jurisdictional and sectoral planning and reporting on biodiversity.

4.4 Canada has been slow to implement the Canadian Biodiversity Strategy and deadlines have been missed. Federal implementation of the Strategy is still in its early stages as only two of eight federal biodiversity implementation plans (modules) have been completed to date.

4.5 Completed modules do not contain time frames, resources to be allocated, expected results or performance indicators. An overall federal implementation plan, incorporating these elements, is needed to achieve national goals and to judge Canada's performance on biodiversity against our international commitments.

4.6 *Canada's National Report to the Conference of the Parties to the Convention on Biological Diversity*, currently in draft form, recognizes many challenges associated with biodiversity and identifies activities that are occurring in Canada. However, the Report is missing many elements, such as targets and time frames that are needed to operationalize and fully implement the Canadian Biodiversity Strategy.

4.7 Future reporting at the international, federal and provincial levels needs to reflect progress against predetermined measurable targets. This will allow for results-oriented reporting and a rigorous evaluation of achievements to date.

Expanding Horizons — A Strategic Approach to Sustainable Development

Chapter 5 – Main Points

5.1 The pursuit of sustainable development can be understood as a journey. Guided by a need for better decision making, this journey is an exploration of new ways of thinking and acting that emerge as we integrate economic, environmental and social perspectives. This chapter presents a description of sustainable development management, its stages and some key characteristics.

5.2 We studied a number of organizations noted for their progress toward sustainable development. In responding to its challenges, these organizations illustrate a common approach to developing strategy.

5.3 In a number of ways, this approach differs from traditional strategy development. It requires a broader perspective, which expands the time horizons, the field of contributors and the range of options considered in decision making. It articulates a long-term vision of where the organization wants to go and clearly enunciates the values and principles that will guide it on the way.

5.4 Effective sustainable development strategies also involve the application of sound management practices. Education and communication build commitment and capability throughout the organization. Clear and measurable objectives, goals and targets are identified to move the organization toward its vision. Processes and procedures are monitored and reviewed to allow the organization to assess progress and make modifications where necessary.

5.5 In this chapter, we identify a number of tools common to the organizations we studied — tools that support the organizations in their progress toward sustainable development. These tools include scenario building, the use of collaborative and advisory structures, and a life cycle management approach to policies, products and operations.

5.6 The organizations we studied have realized many opportunities and benefits inherent in the pursuit of sustainable development. Federal departments and agencies can learn from these and other examples as they develop and implement their own sustainable development strategies.

Environmental Assessment – A Critical Tool for Sustainable Development

Chapter 6 – Main Points

6.1 Environmental assessment is the examination of planned projects, programs, policies or activities to ensure that potential impacts on the environment receive careful consideration before decisions are taken in connection with them. It is a critically important planning tool, given the potential for serious and irreversible damage to the environment from human activity.

6.2 Significant environmental consequences can be overlooked and environmental damage can occur as a result of some of the deficiencies that we have noted in the conduct of screenings. Screenings account for more than 99 percent of the approximately 5,000 environmental assessments carried out each year under the Canadian Environmental Assessment Act.

- Screenings may not consider all of the elements of a project or all of its potentially significant environmental impacts.
- Monitoring of mitigation measures and follow-up of environmental results are insufficient.

6.3 There are significant deficiencies in the quality and usefulness of public information about federal environmental assessment, particularly information on screenings. For example:

- Information in the federal environmental index is incomplete and difficult to use.
- A majority of the screening reports we examined did not provide sufficient information to determine if all significant environmental effects had been considered.

6.4 Environmental assessment is an important tool for dealing with broad environmental and sustainable development implications of policies and programs. Departments have been slow to implement environmental assessment of programs and policies as required by a 1990 Cabinet directive.

6.5 The federal government is not gathering the information needed to let Canadians know whether or not environmental assessment is achieving expected results.

6.6 Good practices identified during our audit provide a basis for improving the quality of environmental assessment.

Counting the Environment In

Chapter 7 – Main Points

7.1 As government departments struggle with defining and implementing sustainable development, they need reliable information on the potential environmental and social effects of their activities, the costs of environmental management, and the potential benefits of alternative approaches.

7.2 Agriculture and Agri-Food Canada and other federal departments are taking proactive steps by implementing Environmental Management Systems to reduce the potential environmental impacts of their operations. Jointly with Agriculture and Agri-Food Canada, we examined how combining financial and non-financial data about their operations could improve environmental decisions and could be used for reporting performance. Similar measures could be applied consistently across government by other custodial departments.

7.3 Agriculture and Agri-Food Canada has identified significant opportunities for cost reductions and environmental benefits through implementation of pollution prevention and resource conservation programs, particularly through energy savings. However, managers may be constrained from taking full advantage of these opportunities by limited resources, perceived disincentives and lack of awareness of possible investments. These constraints are shared by other departments.

7.4 A review of emerging practices in other organizations provides lessons about how to measure, report on and improve environmental performance. Overall, the public sector has yet to catch up with some advanced private sector organizations in tracking and reporting the environmental aspects of their operations, partly because of differences in mandate and incentives. The Government of Canada has an opportunity to demonstrate leadership in developing and using analytical tools for these purposes.

7.5 The Commissioner of the Environment and Sustainable Development is committed to a five-year project to assist government departments in developing decision support tools for integrating environmental, social and economic information. The first phase (this chapter) addresses how environmental information can be brought into decisions about the federal government's extensive operations. Subsequent phases will focus on implementation and on developing decision support tools for policies and programs.

Performance Measurement for Sustainable Development Strategies

Chapter 8 – Main Points

8.1 Through amendments to the *Auditor General Act* (1995), the federal government launched a new process for building environmental and sustainable development considerations into the mandates of departments. Establishing and using performance indicators — indicators of how well departments are doing in meeting their objectives and implementing their action plans — is critical for the success of this government-wide effort.

8.2 The sustainable development strategies are intended to establish the sustainable development objectives and action plans for each federal department subject to the Act. They are expected to be comprehensive, results-oriented and developed in consultation with the department's clients, partners and other stakeholders. Departments have committed to reporting annually on their progress toward sustainable development in Part III of the Estimates.

8.3 This chapter summarizes our work on performance measurement for sustainable development strategies. The purpose of this study is to advance the application of performance measurement to the management of environmental and sustainable development issues in federal government departments by summarizing key concepts and success factors and by describing the characteristics of good performance information. The study is also intended to help parliamentarians set their expectations for the strategies tabled by departments last year, and for the sustainable development aspects of departmental performance reports that will be issued annually. Parliamentarians are the main clients for the strategies and performance reports. Their visible interest in and use of this information will provide an important incentive for departments to make continual improvements to its quality.

8.4 Sustainable development involves the integration of social, economic and environmental considerations into how an organization defines its objectives and conducts its business. Government organizations have typically focussed on only one of these three dimensions — the one related to the public policy role for which each organization was established. Sustainable development also implies extending the planning horizon, consistent with considering the needs of both current and future generations. Federal government departments are now being challenged to broaden their perspective on the implications of what they do in order to protect and promote the well-being of both people and the environment that supports them.

8.5 There is no "master list" of generally applicable performance indicators for sustainable development. Rather, the starting points for departments are an assessment of their sustainable development impacts in the context of their existing public policy roles, and the goals they set to accentuate the positive aspects and mitigate the negative aspects. However, it is important that government departments work together to develop and use common indicators in areas where they are pursuing common objectives.

8.6 While the principles of sustainable development are relatively new, the principles of performance measurement and managing for results are well established and apply equally to sustainable development objectives.

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – 1998

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La mesure de la performance des stratégies de développement durable

Chapitre 8 – Points saillants

8.1 En modifiant la *Loi sur le vérificateur général* (1995), le gouvernement fédéral a mis en oeuvre un nouveau processus pour intégrer les considérations liées à l'environnement et au développement durable aux mandats des ministères. L'établissement et l'utilisation d'indicateurs de la performance — qui précisent dans quelle mesure les ministères atteignent leurs objectifs et mettent en oeuvre leurs plans d'action — sont essentiels au succès de cet effort déployé dans toute l'administration fédérale.

8.2 Les stratégies de développement durable ont pour objet d'établir les objectifs de développement durable et les plans d'action de chaque ministère fédéral visé par la *Loi*. Elles doivent être globales, orientées vers les résultats et élaborées de concert avec les clients et les partenaires du ministère ainsi qu'avec d'autres intervenants. Les ministères se sont engagés à rendre compte chaque année, dans la Partie III du *Budget des dépenses*, des progrès accomplis en vue du développement durable.

8.3 Le présent chapitre résume nos travaux sur la mesure de la performance des stratégies de développement durable. L'étude a pour objet de promouvoir l'application de la mesure de la performance à la gestion des enjeux liés à l'environnement et au développement durable dans les ministères fédéraux en résumant les concepts clés et les facteurs de réussite et en décrivant les caractéristiques d'une bonne information sur la performance. Elle a aussi pour objet d'aider les parlementaires à déterminer leurs attentes tant à l'égard des stratégies qui ont été déposées par les ministères l'année dernière qu'à l'égard des aspects du développement durable traités dans les rapports sur le rendement ministériel qui seront soumis annuellement. Les parlementaires sont les principaux clients visés par ces stratégies et par les rapports sur le rendement. L'intérêt qu'ils manifestent pour cette information et l'utilisation qu'ils en font inciteront fortement les ministères à en améliorer continuellement la qualité.

8.4 Le développement durable intègre des considérations sociales, économiques et environnementales à la détermination des objectifs et à la conduite des affaires d'une organisation. Jusqu'ici, les organisations gouvernementales ont fait porter leurs efforts sur l'une seulement de ces trois dimensions, soit celle qui est liée au rôle d'intérêt public pour lequel chaque organisation a été créée. Le développement durable élargit également l'horizon de la planification en tenant compte des besoins des générations actuelles et futures. Les ministères fédéraux doivent maintenant s'intéresser davantage à l'impact de leurs activités de manière à protéger et à promouvoir le bien-être de la population et l'environnement dans lequel elle vit.

8.5 Il n'y a pas de « liste maîtresse » d'indicateurs de la performance généralement applicables au développement durable. Le point de départ pour les ministères est différent. Ils doivent plutôt, d'une part, évaluer leur impact en matière de développement durable dans le contexte de leur rôle d'intérêt public actuel et, d'autre part, se donner des objectifs pour, à la fois, renforcer les aspects positifs et atténuer les aspects négatifs de cet impact. Toutefois, il est important que les ministères unissent leurs efforts pour élaborer et utiliser des indicateurs communs dans des secteurs où ils ont des objectifs communs.

8.6 Les principes du développement durable sont relativement nouveaux, mais les principes de la mesure du rendement et de la gestion axée sur les résultats sont bien établis et s'appliquent également aux objectifs de développement durable.

Prendre les coûts environnementaux en compte

Chapitre 7 – Points saillants

7.1 Au moment où ils tentent de définir et de mettre en oeuvre le développement durable, les ministères ont besoin d'une information fiable sur les effets environnementaux et sociaux éventuels de leurs activités, les coûts de la gestion environnementale et les avantages éventuels des approches de rechange.

7.2 Agriculture et Agroalimentaire Canada et d'autres ministères fédéraux prennent des mesures proactives en mettant en place des systèmes de gestion de l'environnement qui visent à réduire les impacts environnementaux éventuels de leurs activités. En collaboration avec Agriculture et Agroalimentaire Canada, nous avons examiné comment l'utilisation combinée des données financières et non financières sur ses activités pouvait améliorer les décisions environnementales et servir à communiquer l'information sur la performance. Des mesures semblables pourraient être appliquées uniformément, dans l'ensemble du gouvernement, par d'autres ministères responsables des biens.

7.3 Agriculture et Agroalimentaire Canada a trouvé d'intéressantes possibilités de réduire les coûts et d'obtenir des avantages sur le plan environnemental par la mise en oeuvre de programmes de prévention de la pollution et de conservation des ressources, et en particulier par des économies d'énergie. Toutefois, il est possible que les gestionnaires ne puissent pas tirer pleinement parti de ces possibilités parce que leurs ressources sont limitées, parce qu'ils en sont dissuadés et parce qu'ils ne sont pas assez au courant des investissements possibles. D'autres ministères ont les mêmes contraintes.

7.4 L'examen des nouvelles pratiques dans d'autres organisations fournit des leçons sur la manière de mesurer et d'améliorer la performance environnementale et de communiquer l'information à ce sujet. Dans l'ensemble, le secteur public doit encore rattraper son retard par rapport à certaines organisations avant-gardistes du secteur privé pour ce qui est du suivi des aspects environnementaux de ses activités et de la communication de l'information à ce sujet. Cette situation est attribuable, en partie, au fait que les mandats et les mesures incitatives des deux secteurs diffèrent. Le gouvernement du Canada a la possibilité de tracer la voie en élaborant et en utilisant des outils d'analyse à ces fins.

7.5 Le commissaire à l'environnement et au développement durable s'est engagé dans un projet quinquennal afin d'aider les ministères à élaborer des outils qui intégreraient l'information environnementale, sociale et économique à la prise de décisions. La première phase (le présent chapitre) porte sur les moyens à prendre pour intégrer l'information environnementale aux décisions qui s'appliquent à l'ensemble des activités du gouvernement fédéral. Les phases subséquentes viseront essentiellement la mise en oeuvre et l'élaboration d'outils pour appuyer les décisions relatives aux politiques et aux programmes.

L'évaluation environnementale : un outil de première importance pour le développement durable

Chapitre 6 – Points saillants

6.1 L'évaluation environnementale a pour objet d'examiner les projets, les programmes, les politiques ou les activités prévus pour faire en sorte que leurs effets éventuels sur l'environnement soient évalués attentivement avant que des décisions soient prises à leur sujet. Il s'agit d'un outil de planification de première importance si l'on considère que l'activité humaine peut avoir des effets graves et irréversibles sur l'environnement.

6.2 Certaines des lacunes que nous avons relevées dans la conduite des examens préalables peuvent avoir des répercussions importantes et causer des dommages à l'environnement. Les examens préalables représentent plus de 99 p. 100 des quelque 5 000 évaluations environnementales effectuées chaque année conformément à la *Loi canadienne sur l'évaluation environnementale*.

- Il se peut que les examens préalables ne tiennent pas compte de tous les éléments d'un projet ni de tous ses effets éventuels importants sur l'environnement.
- La surveillance des mesures d'atténuation et le suivi des résultats environnementaux sont insuffisants.

6.3 L'information diffusée au public sur les évaluations environnementales effectuées par le gouvernement fédéral, et particulièrement l'information sur les examens préalables, comporte des lacunes importantes en ce qui a trait à la qualité et à l'utilité. En voici des exemples.

- L'information contenue dans l'Index fédéral des évaluations environnementales est incomplète et difficile à utiliser.
- Dans la plupart des rapports d'examen préalable que nous avons examinés, l'information fournie n'était pas suffisante et ne permettait pas de déterminer si tous les effets environnementaux importants avaient été pris en compte.

6.4 L'évaluation environnementale se révèle un outil important pour traiter les répercussions plus générales des politiques et des programmes sur l'environnement et le développement durable. Les ministères ont réagi avec lenteur à une directive du Cabinet établie en 1990 sur la mise en oeuvre de l'évaluation environnementale des programmes et des politiques.

6.5 Le gouvernement fédéral ne recueille pas l'information qui permettrait aux Canadiens de savoir si l'évaluation environnementale produit ou non les résultats escomptés.

6.6 Les bonnes pratiques recensées au cours de notre vérification fournissent un point d'appui pour améliorer la qualité de l'évaluation environnementale.

Élargir les horizons : une approche stratégique pour le développement durable

Chapitre 5 – Points saillants

5.1 On peut comparer la recherche du développement durable à une conquête. Guidée par le besoin d'améliorer la prise de décisions, cette conquête passe par l'exploration de nouvelles façons de penser et d'agir à mesure que sont intégrées les perspectives économiques, environnementales et sociales. Dans le présent chapitre, nous décrivons la gestion du développement durable, ses étapes et quelques-unes de ses principales caractéristiques.

5.2 Nous avons étudié un certain nombre d'organisations qui ont fait des progrès notoires en matière de développement durable. Nous avons constaté qu'elles avaient une approche commune à l'élaboration d'une stratégie.

5.3 À un certain nombre d'égards, cette approche diffère des approches traditionnelles d'élaboration d'une stratégie. Elle exige une perspective plus globale, qui élargit les horizons temporels et l'éventail des points de vue et des options considérés pour la prise de décisions. Elle repose sur une vision à long terme de ce que veut accomplir l'organisation et sur un exposé clair des valeurs et des principes qui la guident.

5.4 Les stratégies efficaces de développement durable comportent également l'application de saines pratiques de gestion. Les activités de sensibilisation et de communication développent l'engagement et les compétences dans toute l'organisation. Des objectifs, des buts et des cibles clairs et mesurables sont fixés pour faire progresser l'organisation dans sa vision. Les processus et les procédures sont surveillés et revus pour permettre à l'organisation d'évaluer ses progrès et d'apporter des correctifs lorsqu'il y a lieu.

5.5 Dans ce chapitre, nous attirons l'attention sur un certain nombre d'outils communs aux organisations que nous avons étudiées — des outils qui les aident à progresser vers le développement durable. Ces outils comprennent l'élaboration de scénarios, l'utilisation de structures de coopération et de consultation, et l'application d'une approche de gestion du cycle de vie pour les politiques, les produits et les activités.

5.6 La recherche du développement durable a apporté de nombreux avantages et possibilités aux organisations que nous avons étudiées. Les ministères et les organismes fédéraux peuvent tirer des leçons des exemples de ces organisations et d'autres exemples aux fins de l'élaboration et de l'application de leur propre stratégie de développement durable.

La biodiversité au Canada : le temps presse

Chapitre 4 – Points saillants

4.1 Par diversité biologique, ou biodiversité, on entend la variabilité de la vie sur Terre. Elle comprend toutes les formes de vie et leurs systèmes biologiques connexes. La conservation et l'utilisation durable de la diversité biologique constituent un enjeu fort complexe. Pour mieux comprendre et faire comprendre ce qu'est la conservation de la biodiversité, il faut conjuguer et intégrer les efforts au nom de l'ensemble des instances, des secteurs et des parties intéressées du Canada.

4.2 La compétence en environnement, par exemple en biodiversité, est partagée entre les gouvernements fédéral et provinciaux. Un dialogue au sein des conseils ministériels pertinents s'impose afin que les enjeux de la biodiversité soient pris en considération partout au Canada. On nous a dit que la biodiversité doit figurer de façon plus visible et plus fréquente aux ordres du jour des conseils ministériels des pêches, des forêts, de l'agriculture, de la faune et de la flore, des parcs et de l'environnement.

4.3 Le Canada a été le premier pays industrialisé à ratifier, dans le cadre de l'Organisation des Nations Unies, la *Convention sur la diversité biologique*. La principale réponse du Canada à la Convention a consisté à élaborer la *Stratégie canadienne de la biodiversité*, première étape importante sur la voie de l'établissement, par les instances et par les secteurs, d'un cadre national de planification et de communication de l'information en matière de biodiversité.

4.4 Le Canada a tardé à mettre en oeuvre la *Stratégie canadienne de la biodiversité* et il a manqué des échéances. La mise en oeuvre fédérale de la Stratégie en est encore à ses débuts, car seulement deux des huit plans (ou « modules ») fédéraux de mise en oeuvre de la biodiversité ont été achevés à ce jour.

4.5 Les modules achevés ne présentent ni échéanciers, ni ressources à affecter, ni résultats escomptés, ni indicateurs de la performance. Pour atteindre les objectifs nationaux et évaluer la performance du Canada dans le domaine de la diversité biologique en fonction de ses engagements internationaux, il faut un plan de mise en oeuvre fédéral global qui tienne compte de ces éléments.

4.6 Le *Rapport national du Canada à la Conférence des Parties à la Convention sur la diversité biologique*, actuellement sous forme de version préliminaire, reconnaît les nombreux défis liés à la biodiversité et recense les activités qui sont menées au Canada. Le rapport néglige cependant de nombreux éléments, comme les cibles et les échéanciers nécessaires pour rendre la *Stratégie canadienne de la biodiversité* opérationnelle et la mettre en oeuvre pleinement.

4.7 L'information qui sera communiquée aux niveaux international, fédéral et provincial devra faire le point en fonction de cibles mesurables prédéterminées. Ainsi, il sera possible d'axer cette information sur les résultats et de dresser un bilan rigoureux des réalisations à ce jour.

Réagir aux changements climatiques : il est temps de repenser la stratégie d'intervention du Canada

Chapitre 3 – Points saillants

3.1 La question des changements climatiques est sans doute, parmi les nouveaux problèmes environnementaux qu'ont à résoudre les gouvernements de la planète, celui qui pose le plus grand défi. Le Canada estime que les changements climatiques sont en partie inévitables. Le gouvernement fédéral a conclu que cette menace est réelle et qu'il faut en gérer les risques. Il croit que les coûts potentiels sont tout simplement trop élevés sur les plans environnemental, économique et humain pour ne pas prendre des mesures immédiates et préventives.

3.2 Trouver solution aux changements climatiques est un travail de collaboration entre gouvernements ou paliers de gouvernement. Il faut donc, à ce chapitre, une entente claire, entre tous les intervenants gouvernementaux, sur les rôles et les responsabilités impartis à chacun. En outre, toutes les initiatives gouvernementales doivent être intégrées et doivent miser sur la participation de l'industrie, des organisations non gouvernementales et des particuliers.

3.3 Depuis 1990, le Canada s'est engagé, dans le cadre de sa politique intérieure, à stabiliser, d'ici l'an 2000, ses émissions de gaz à effet de serre aux niveaux de 1990. En 1995, les ministres fédéraux, provinciaux et territoriaux de l'énergie et de l'environnement ont approuvé le Programme d'action national concernant les changements climatiques (PANCC) afin de fournir une orientation stratégique permettant l'atteinte de l'objectif de stabilisation. Toutefois, de l'aveu même du gouvernement fédéral, l'accroissement des niveaux de 1990 des émissions de gaz à effet de serre, au Canada, va à l'encontre de cet objectif.

3.4 À notre avis, la mise en oeuvre du PANCC a été inadéquate. Nombre des éléments clés nécessaires à la gestion de la mise en oeuvre de la démarche canadienne visant à parer aux changements climatiques manquent ou sont incomplets. Par exemple, les rôles et les responsabilités ne sont pas clairement attribués, il n'existe aucun programme national de communications ni aucun plan de mise en oeuvre du programme, peu de dispositions ont été prises pour contrôler régulièrement l'évolution de la situation en fonction des résultats, et aucun rapport sommaire consolidé n'est présenté au Parlement. Notre vérification a débouché sur la formulation de plusieurs recommandations destinées à régler ces points. Ces recommandations valent également pour toute démarche visant à assurer le respect de tout nouvel engagement que pourrait prendre le Canada au chapitre des changements climatiques, et sont en quelque sorte des acquis pour l'avenir.

3.5 Nous croyons que le gouvernement fédéral devrait jouer un rôle directeur de premier ordre dans certains domaines, ce qui favoriserait le respect de l'orientation stratégique présentée dans le PANCC. Le gouvernement fédéral doit être l'architecte principal, au pays, de l'élaboration de mesures réalistes, étendues et rentables visant à parer aux changements climatiques. Cela, il doit le faire tout en évitant le plus possible de créer des retombées négatives, mais en cherchant, par contre, à maximiser tout ce qui pourrait avoir un effet positif sur l'économie canadienne. Il faut repenser en grande partie l'approche retenue pour la mise en oeuvre des diverses mesures et se doter d'une structure de gestion efficace.

Les engagements internationaux du Canada en matière d'environnement : une collaboration mondiale

Chapitre 2 – Points saillants

2.1 La qualité de l'environnement au Canada dépend non seulement du comportement des Canadiens, mais aussi des activités qui se déroulent à l'extérieur des frontières nationales. La pollution atmosphérique, la détérioration de la couche d'ozone, les changements climatiques, la diminution des ressources halieutiques au large des côtes et la pollution des océans sont autant de problèmes environnementaux qui ne connaissent pas de frontières.

2.2 De plus en plus conscients de cette interdépendance environnementale, les différents pays du monde ont réagi en concluant un large éventail d'accords internationaux. Le Canada a participé activement à la négociation de ces accords pour assurer la défense de ses intérêts nationaux, et doit continuer sur cette voie.

2.3 Le Canada a souvent joué un rôle clé dans la définition du programme international en matière d'environnement et est signataire d'un nombre important d'accords internationaux liés aux questions d'environnement et de développement durable. Le Canada consacre beaucoup de temps et d'efforts à l'élaboration de ces accords. En effet, à chaque accord correspond un calendrier de réunions et de travaux internationaux, de même qu'un processus interne distinct par lequel le Canada établit sa propre position en tant que négociateur.

2.4 En adhérant à ces accords, le Canada a pris des engagements à l'égard de la communauté internationale. En retour, il est en mesure de tirer des avantages des engagements pris par celle-ci.

2.5 Un des principes fondamentaux du droit international veut que les pays s'acquittent de bonne foi de leurs obligations internationales. Dans certains cas, cela signifie qu'ils doivent traduire ces obligations par des mesures significatives sur le plan national. Dans d'autres cas, les engagements exigent que les pays collaborent avec les autres pays signataires d'accords internationaux.

2.6 Toutefois, le Canada n'assure pas un suivi systématique de la mise en oeuvre de ses engagements internationaux en matière d'environnement. Par conséquent, il n'a pas une vision d'ensemble de la façon dont il s'acquitte des obligations prises, c'est-à-dire des réussites enregistrées, des écarts à combler et des leçons tirées. Ce manque d'information accessible nuit grandement à la capacité du Parlement de surveiller la façon dont le Canada donne suite à ses engagements actuels et futurs en la matière.

2.7 Le fait de posséder et d'utiliser de l'information fiable constitue le facteur déterminant d'une gestion efficace des engagements du Canada. De concert avec les ministères, le commissaire à l'environnement et au développement durable s'emploie à constituer une base de données, accessible au public, sur les engagements internationaux pris par le Canada en matière d'environnement afin que le gouvernement puisse mieux rendre compte au Parlement de leur mise en oeuvre. Le commissaire continuera également d'analyser en profondeur le degré d'application de certains accords. Il s'attend toutefois à ce que le ministère des Affaires étrangères et du Commerce international et Environnement Canada procèdent, de concert avec d'autres ministères, à une évaluation plus globale de la mesure dans laquelle le Canada respecte les obligations qu'imposent ces accords.

- Bon nombre de stratégies semblent être moins un engagement à changer afin de promouvoir le développement durable qu'un maintien du retour au statu quo. Ces stratégies ont tendance à être axées plus sur des réalisations antérieures que sur des orientations futures. Moins de la moitié des ministères définissent les changements précis qu'il faudrait apporter aux politiques, aux programmes, aux lois, aux règlements ou aux activités afin de mettre en oeuvre leur stratégie.

1.6 Il faut trouver sans délai une solution au manque de points de repère. Nous sommes d'avis que les ministères devraient établir un ensemble de cibles claires et les présenter à la Chambre des communes au printemps de 1999.

1.7 D'ici le 15 décembre 2000, les ministères sont censés présenter leur deuxième stratégie de développement durable. En nous inspirant de l'expérience acquise lors de la première série de stratégies, nous nous attendons à ce que les ministères améliorent considérablement la qualité de leur deuxième stratégie et à ce qu'ils s'attardent davantage aux changements qu'ils apporteront pour promouvoir le développement durable.

L'écologisation du gouvernement du Canada : les stratégies de développement durable

Chapitre 1 – Points saillants

1.1 En 1995, le gouvernement fédéral a adopté une loi pour l'aider à renforcer sa capacité de protéger l'environnement et de promouvoir le développement durable. Selon les modifications apportées à la *Loi sur le vérificateur général*, les ministres devaient préparer une stratégie de développement durable pour leur ministère.

1.2 La stratégie de développement durable devait aider les ministères à élargir leur perspective sur leurs activités et la façon de les mener — c'est-à-dire prendre en compte de façon plus systématique les éléments environnementaux, économiques et sociaux dans leurs politiques, leurs programmes et leurs activités. La stratégie devait transformer l'expression « développement durable » en actes. Le commissaire à l'environnement et au développement durable a été chargé d'aider les parlementaires à examiner les stratégies des ministères.

1.3 La préparation d'une stratégie de développement durable est un processus systématique qui :

- débute en déterminant les activités d'un ministère et la façon de les mener;
- évalue ces activités par rapport à leurs impacts sur le développement durable;
- cherche à connaître le point de vue des clients, des partenaires et des autres intervenants sur les priorités;
- établit des buts, des objectifs et des points de repère servant à mesurer les progrès;
- présente un plan d'action pour traduire ces buts en résultats concrets;
- se termine par une explication des façons dont le ministère mesurera sa performance et en rendra compte.

1.4 Lors de notre premier examen des stratégies de développement durable élaborées par les ministères, nous avons constaté que la plupart d'entre eux avaient préparé une stratégie conforme à la majorité des exigences de base précitées. Ainsi, pour la première fois, nous avons une image qui montre comment chaque ministère perçoit le développement durable et quelles sont les mesures qu'il compte prendre pour le promouvoir. Par ailleurs, la préparation d'une stratégie a amélioré la sensibilisation aux enjeux du développement durable dans ces ministères.

1.5 Cependant, notre examen des stratégies nous a permis de déceler plusieurs faiblesses, deux d'entre elles étant fondamentales.

- À part quelques exceptions, les ministères n'ont pas établi les cibles claires et mesurables qui sont essentielles à la réussite ou à l'échec du processus des stratégies de développement durable. Par conséquent, les ministères, les parlementaires et le public ne possèdent pas les points de repère nécessaires pour juger si les stratégies sont mises en oeuvre et donnent de bons résultats, ou pour déterminer quand une mesure correctrice pourrait s'imposer.

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Points saillants

Annexe D

Groupe des conseillers en environnement du commissaire à l'environnement et au développement durable

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Annexe C (suite)

Sujet de la pétition	Signataire	Ministère fédéral	Date de la pétition	Date de réception de la réponse	Réponse
9. **Accord multilatéral sur l'investissement.** Le signataire est préoccupé par les effets incertains de l'Accord sur l'équité sociale, la protection de l'environnement, la protection de la santé publique et le développement durable, et il demande que les conditions et les objectifs de l'Accord soient précisés en relation avec ces questions.	Association canadienne des médecins pour l'environnement	Environnement Canada, Affaires étrangères et Commerce international	Le 14 janvier 1998	En suspens	
10. **Accord sur l'harmonisation.** Le signataire demande au ministre de l'Environnement de ne pas signer l'Accord pancanadien sur l'harmonisation environnementale, car celui-ci conduirait le gouvernement fédéral à transférer aux provinces ses rôles et responsabilités en matière d'environnement, ce qui serait incompatible avec le développement durable.	Association canadienne du droit de l'environnement	Environnement Canada	Le 22 janvier 1998	En suspens	

Annexe C (suite)

Sujet de la pétition	Signataire	Ministère fédéral	Date de la pétition	Date de réception de la réponse	Réponse
7. **Gestion des ressources.** Le signataire soutient que le programme visant à céder les installations d'élevage du saumon de l'Atlantique à des intérêts privés ne prend pas en compte la nécessité pour Pêches et Océans de remplir son rôle de conservateur dans les provinces de l'Atlantique et qu'il ne reconnaît pas que certains stocks génétiques de rivières particulières continuent d'être menacés par la pollution et d'autres facteurs. Le signataire demande également que le gouvernement élabore une politique nationale pour les programmes d'élevage en pisciculture des côtes Est et Ouest.	Queen's County Fish and Game Association	Pêches et Océans Canada	Le 25 juin 1997	Le 1er octobre 1997	Le Ministre a répondu que le Ministère avait décidé de céder les installations d'élevage des Provinces maritimes à la suite d'importantes réductions de son budget; de plus, la plupart des pêches commerciales du saumon étaient fermées et le Ministre était d'avis que les mesures de conservation du poisson pêché dans les rivières rendaient inutile toute autre activité de constitution des stocks.
8. **Effets de l'appauvrissement de la couche d'ozone.** Le signataire demande de l'information sur les mesures que le gouvernement prendra, au cours des cinq prochaines années, pour protéger la santé et les moyens d'existence des Canadiens contre les effets de l'appauvrissement de la couche d'ozone. En particulier, le signataire demande que l'on prenne des engagements budgétaires précis et que l'on fixe des objectifs et des échéanciers concernant les recherches sur les effets sur la santé et l'environnement de l'accroissement du rayonnement UV-B et la nature des mesures de protection à prendre. Le signataire demande également de l'information sur l'engagement continu du Canada à l'égard de l'élaboration de la politique et de mesures de mise en oeuvre aux termes du *Protocole de Montréal* dans les pays en développement. De plus, le signataire demande de l'information sur la mise en application des lois interdisant l'importation et l'exportation de substances responsables de l'appauvrissement de la couche d'ozone.	Les Ami(e)s de la Terre	Pêches et Océans Canada, Environnement Canada, Ressources naturelles Canada, Agriculture et Agroalimentaire Canada	Le 8 septembre 1997	Le 19 janvier 1998 Le 23 mars 1998	Le ministre des Pêches et des Océans a indiqué que le Ministère avait commandé une étude visant à fournir une information de base sur le rayonnement UV-B et sur ses effets sur les espèces de crustacés et de poissons qui ont une importance commerciale. Aux termes d'un protocole d'entente, Pêches et Océans collabore aussi avec Environnement Canada, Ressources naturelles Canada et Agriculture et Agroalimentaire Canada afin de coordonner l'utilisation de la science et des technologies aux fins du développement durable Agriculture et Agroalimentaire Canada a fourni de l'information sur les résultats de la recherche effectuée jusqu'à la fin du financement du Plan vert en 1997, en ce qui concerne les effets sur les productions végétales des rayonnements UV-B. Le Ministère cherche activement à trouver des substituts au bromure de méthyle, substance qui appauvrit la couche d'ozone et qui est utilisée sur une grande échelle par la communauté agricole. Ces activités se poursuivront jusqu'en 2005, date à laquelle les pays développés cesseront complètement d'utiliser ce produit.

Annexe C (suite)

Sujet de la pétition	Signataire	Ministère fédéral	Date de la pétition	Date de réception de la réponse	Réponse
4. **Évaluation environnementale.** Le signataire prétend que la construction de la ligne de transport d'électricité entre Golden et Field, en Colombie-Britannique, constituait une infraction aux règlements et aux politiques fédérales.	M. Graeme Pole	Patrimoine canadien	Le 3 mars 1997	Le 25 juin 1997	La Ministre a déclaré que l'examen préalable avait été effectué conformément à toutes les exigences de la *Loi canadienne sur l'évaluation environnementale* et elle a conclu que les effets étaient négligeables ou qu'ils pouvaient être atténués à l'aide de la technologie existante. Le Ministère a conclu que la ligne de transport d'électricité devant servir à approvisionner Field constituait un moyen plus acceptable pour l'environnement et plus rentable que les autres moyens envisagés.
5. **Fuites et émissions d'huile et de gaz.** Le signataire prétend que le gouvernement ne s'occupe pas des infractions aux règlements en Alberta en ce qui a trait aux fuites et aux émissions de gaz sulfureux.	Révérend W. A. Ludwig	Ressources naturelles Canada	Le 9 avril 1997	Le 8 mai 1997	Le Ministre a répondu que les infractions alléguées ne relevaient pas de la compétence fédérale mais plutôt de la compétence du Alberta Energy Board et des autorités provinciales.
6. ***Règlement sur l'exploitation minière au Canada.*** Le signataire prétend que le système actuel d'accès ouvert concernant les droits miniers dans les Territoires du Nord-Ouest n'est pas compatible avec la notion de développement durable.	Canadian Arctic Resources Committee	Affaires indiennes et du Nord Canada	Le 16 avril 1997	Le 2 septembre 1997	La Ministre a répondu qu'il existe une multitude de lois et de règlements qui régissent l'industrie minière dans les Territoires du Nord-Ouest et qui tiennent compte du principe de développement durable. Le régime de jalonnement relatif aux licences, qui est appuyé par le cadre de réglementation général, est conforme aux principes de développement durable. La Ministre a de plus indiqué que le régime appliqué actuellement dans les Territoires du Nord-Ouest évolue par suite du règlement des revendications territoriales globales et de l'établissement de nouvelles institutions pour l'administration des terres et la gestion des ressources. Tout examen complet des lois et règlements actuels sur la gestion des ressources, y compris le *Règlement sur l'exploitation minière au Canada*, serait plus approprié après le règlement des revendications territoriales.

Annexe C

Sommaire des pétitions reçues

Sujet de la pétition	Signataire	Ministère fédéral	Date de la pétition	Date de réception de la réponse	Réponse
1. **Évaluation environnementale.** Le signataire fait état de plusieurs inquiétudes au sujet des mesures d'atténuation proposées et des constatations contenues dans le rapport d'examen préalable concernant le Osprey Ridge Golf Course qui a été présenté dans le cadre du programme Travaux d'infrastructure Canada/Nouvelle-Écosse.	The Ecoforestry School in the Maritimes	L'Agence de promotion économique du Canada atlantique	Le 2 octobre 1996	Le 7 février 1997	Le Ministre a indiqué que l'Agence s'était assurée que le promoteur du projet avait compris la nécessité de prendre des mesures d'atténuation et qu'il avait réservé des fonds pour l'exécution des projets environnementaux.
2. **Politique en matière de transport.** Le signataire demande que le gouvernement dresse un plan directeur de transport pour assurer la viabilité du système de transport du Canada.	Rail Ways to the Future Committee	Transports Canada	Le 6 mars 1997	Le 3 juillet 1997	Le Ministre a répondu que le gouvernement fédéral s'oriente vers la déréglementation économique et la commercialisation d'installations telles que les services portuaires, aéroportuaires et de navigation aérienne. Un plan directeur ne serait pas conforme à cette approche.
3. **Programme Travaux d'infrastructure Canada.** Le signataire se dit préoccupé des effets sur l'environnement de la composante construction et réfection de routes du programme Travaux d'infrastructure Canada.	Transport 2000 Ontario Inc.	Secrétariat du Conseil du Trésor	Le 9 mars 1997	Le 24 octobre 1997	Le Ministre a indiqué que la composante routes du programme représentait 28,1 p. 100 du financement de la Phase 1 et que la grande majorité des travaux consistaient à réparer les routes existantes; ces travaux étaient souvent menés parallèlement à des projets de remise en état des installations d'aqueduc et d'égout. Une partie du financement de la Phase 2 a été affectée aux projets de transport public. Les projets d'infrastructure en vertu du programme doivent être examinés comme le prévoit la *Loi canadienne sur l'évaluation environnementale* afin de veiller au respect des principes de développement durable.

Annexe B

Comment avoir accès aux stratégies de développement durable des ministères

Par voie électronique, au moyen d'Internet

La plupart des ministères ont enregistré leur stratégie de développement durable sur Internet. Nous avons établi, sur le site Internet du vérificateur général du Canada, des liens avec les stratégies ministérielles.

Pour y avoir accès, veuillez suivre les étapes suivantes :

tapez l'adresse	**http://www.oag-bvg.gc.ca**
cliquez sur	**Le commissaire à l'environnement et au développement durable**
cliquez sur	**Stratégies de développement durable**
cliquez sur	**le ministère de votre choix**

Sur support papier, par l'intermédiaire des différents ministères

On peut obtenir les imprimés des stratégies de développement durable en s'adressant auprès du groupe des communications de chaque ministère.

Pour obtenir un exemplaire :

téléphonez à Référence Canada, au 1-800-667-3355 et demandez le numéro de téléphone du groupe des communications du ministère de votre choix;

composez le numéro et demandez un exemplaire de la stratégie de développement durable du ministère.

Annexe A (suite)

Référence	Principales conclusions
Pêches et Océans Canada – Le saumon du Pacifique : la durabilité de la ressource Décembre 1997, chapitre 28	La capacité du Canada de maintenir le niveau actuel et la diversité du saumon du Pacifique est douteuse, compte tenu des divers facteurs qui influencent la survie du saumon et qui, pour une bonne part, sont hors de son contrôle. Pêches et Océans Canada a rétabli d'importants stocks de saumon, mais d'autres déclinent et un bon nombre d'entre eux sont considérés comme menacés. Des signes indiquent que la perte d'habitats du saumon contribue à ce déclin. Cependant, on ne dispose d'aucun rapport global sur la situation de l'habitat des salmonidés qui permettrait d'évaluer les répercussions de la perte d'habitats sur la ressource. (paragraphe 28.1)
Suivi de vérifications antérieures Décembre 1997, chapitre 35 :	
La protection civile au gouvernement fédéral – Déversements de pétrole et de produits chimiques – 1992, chapitre 24	Cinq ans après la communication de nos préoccupations, il reste beaucoup à faire pour que le Canada soit prêt à faire face aux situations d'urgence liées aux déversements importants d'hydrocarbures et de produits chimiques. (paragraphe 35.2)
Environnement Canada : Les déchets dangereux – la gestion d'un lourd héritage – 1995, chapitre 2	Le Parlement a toujours besoin d'information adéquate sur les risques et les coûts d'assainissement liés aux lieux contaminés fédéraux. Même si des progrès ont été réalisés, les passifs environnementaux sont probablement très substantiels et pourraient influer de façon importante sur la situation financière déclarée du gouvernement. (paragraphe 35.2)
La gestion des déchets radioactifs par le gouvernement fédéral – 1995, chapitre 3	Ressources naturelles Canada est dans la bonne voie, ayant pris des mesures tel l'établissement d'une politique-cadre régissant l'évacuation ou le stockage des déchets radioactifs. Toutefois, il reste beaucoup à faire pour trouver des solutions à long terme visant les déchets nucléaires, les déchets faiblement radioactifs ainsi que les résidus de mines et d'usines d'uranium produits au Canada. (paragraphe 35.1)
La stratégie de développement durable du Bureau du vérificateur général Décembre 1997, chapitre 37	La principale influence que notre stratégie de développement durable exercera sur le Bureau sera de nous inciter à aborder nos travaux de vérification de manière plus globale. (paragraphe 37.68)

Annexe A

Travaux du Bureau du vérificateur général sur l'environnement et le développement durable, 1997

Référence	Principales conclusions
Le contrôle des mouvements transfrontaliers des déchets dangereux Avril 1997, chapitre 4	À cause des lacunes importantes qui existent dans les domaines de la prévention, de la détection et de l'application de la loi, ainsi que du petit nombre d'installations permettant le contrôle matériel des exportations de déchets dangereux à la frontière, le Canada n'est pas en position de savoir dans quelle mesure il respecte ses obligations internationales en matière de prévention du trafic illicite à la frontière. (paragraphe 4.107)
Ressources naturelles Canada – L'efficacité énergétique Avril 1997, chapitre 10	L'amélioration de l'efficacité énergétique est un élément clé de la stratégie du gouvernement fédéral pour parvenir d'ici l'an 2000, comme il s'y est engagé, à stabiliser les émissions de gaz à effet de serre aux niveaux de 1990. On ne dispose pas de renseignements sur la contribution que l'ensemble des initiatives d'efficacité énergétique apporte actuellement, ou est susceptible d'apporter, à l'objectif de stabilisation du Canada. (paragraphes 10.96 et 10.97)
Observations du vérificateur général sur les états financiers du gouvernement du Canada Comptabilisation des passifs et des éventualités environnementaux – 2 octobre 1997 *Comptes publics du Canada* 1997 Volume 1	Les passifs environnementaux du gouvernement sont probablement très importants. Cependant, le gouvernement n'a pas constaté ces passifs dans ses états financiers, car il ne peut les définir et les estimer avec certitude. Je suis toujours d'avis que le gouvernement peut et doit prendre dès maintenant des mesures pour fournir un tableau plus complet des passifs et coûts environnementaux dans les états financiers. Depuis 1994–1995, le gouvernement présente des passifs environnementaux éventuels de 2,8 milliards de dollars dans une note aux états financiers. (pages 1.29 et 1.30)
La pêche du poisson de fond de l'Atlantique Octobre 1997, chapitres 14, 15 et 16	Les problèmes de la pêche au poisson de fond persistent, malgré les 3 milliards de dollars de fonds nouveaux et réaffectés qui ont été dépensés pour soutenir l'industrie, y compris 1,9 milliard dans le contexte de la Stratégie du poisson de fond de l'Atlantique. Il faut améliorer davantage les méthodes de gestion de la pêche pour assurer la durabilité de la ressource. Les gens maintiennent leur dépendance à l'égard de la pêche afin d'accéder aux programmes fédéraux de soutien du revenu, et il existe peu d'autres emplois pour les membres des collectivités côtières. Le problème est aggravé par la faible scolarisation de la majorité, ce qui limite le choix d'autres emplois. (paragraphe 14.95)
Agriculture et Agroalimentaire Canada – Administration du rétablissement agricole des Prairies Décembre 1997, chapitre 74.	Nous avons constaté que le Plan d'activités de 1997–1998 de l'Administration du rétablissement agricole des Prairies comporte des faiblesses dans plusieurs domaines clés. On n'y trouve aucune définition claire de l'orientation stratégique par rapport aux grands enjeux actuels et prévisibles de la gestion des terres et de l'eau qui entravent le rétablissement des terres agricoles des Prairies. Le Plan ne définit pas quels sont les résultats escomptés, dans quelle zone ils doivent être obtenus ni dans quel laps de temps. Il ne précise pas non plus comment seront réparties les ressources financières et autres ressources de façon à atteindre les objectifs stratégiques face à des besoins croissants et de plus en plus divergents. (paragraphe 24.18)
Environnement Canada : l'appauvrissement de la couche d'ozone Décembre 1997, chapitre 27	Grâce au leadership d'Environnement Canada et à la collaboration d'autres ministères fédéraux, des gouvernements provinciaux, de l'industrie et d'autres parties intéressées, le Canada a rempli, et parfois plus que rempli, ses obligations en vertu du Protocole de Montréal. Les réalisations canadiennes se comparent favorablement à celles d'autres pays pour ce qui est d'influer sur le programme international et de le mettre en oeuvre. Le Canada a aussi fait des progrès considérables pour respecter ses engagements intérieurs. (paragraphe 24.131)

On n'a pas encore répondu à deux autres pétitions qui ont été reçues vers la fin de l'exercice.

Prochaines étapes

69. J'ai l'intention de veiller à ce que le processus de pétition soit accessible aux Canadiens et à ce qu'il réponde à leurs besoins. Au cours de la prochaine année, je compte faire un sondage auprès des signataires et des ministères afin de savoir s'ils sont satisfaits du processus et d'obtenir leurs suggestions pour l'améliorer.

70. Nous avons tous un rôle à jouer pour aider le Canada à progresser sur la voie du développement durable. Le processus de pétition est un moyen que peuvent prendre les Canadiens pour faire connaître leurs vues au gouvernement fédéral. Je les invite à y avoir recours.

Conclusion

71. Les organisations tant des secteurs privé que public font l'objet de pressions accrues pour améliorer leur performance et contribuer au développement durable. Ces pressions proviennent d'un large éventail de sources — employés, investisseurs, clients, collectivités, groupes écologistes, gouvernements — et du grand public.

72. À mesure qu'elles ont répondu aux pressions pour une amélioration de leur performance environnementale, les organisations du secteur privé ont commencé à réexaminer leurs processus opérationnels de même que leurs produits et leurs services. Bon nombre d'entre elles ont découvert qu'une stratégie environnementale ou de développement durable bien formulée peut leur procurer un certain nombre d'avantages : meilleure qualité, coûts réduits, amélioration de leur image et de leurs relations avec les parties intéressées. Pour ces sociétés, la protection de l'environnement ne représente plus la rançon des affaires mais une occasion stratégique.

Chaque Canadien a un rôle important à jouer.

73. Notre défi consiste à aider les organismes gouvernementaux à faire la même transition — sur le plan de la pensée et des actions. Il ne s'agit pas d'un défi qui concerne uniquement la politique ou uniquement la gestion. Il s'agit d'un défi qui concerne les deux — une bonne politique appuyée par une gestion efficace. Mais cela signifie que l'on doit accorder une plus grande attention à l'aspect gestion de l'équation du développement durable. Tout comme l'« écologisation » s'est avérée une bonne pratique dans le domaine des affaires, l'« écologisation » du gouvernement sera le reflet d'une saine gestion publique.

Je crois qu'un gouvernement « écologique » constitue une composante importante d'une saine gestion publique.

afin de voir comment les ministères ont répondu à nos recommandations.

Études d'intérêt particulier pour le Parlement

64. Nous pouvons, au moyen d'études spéciales, nous éloigner du cadre de vérification et travailler directement avec les ministères afin de les aider à accroître leur capacité de gérer les questions liées à l'environnement et au développement durable. Au cours de la prochaine année, nous effectuerons des études dans deux secteurs.

- **Gestion axée sur le développement durable.** Le chapitre 5, « Élargir les horizons : une approche stratégique pour le développement durable », examine les approches de gestion des organisations reconnues pour avoir accompli des progrès en matière de développement durable. Nous avons constaté que les stratégies efficaces comprennent l'application de saines pratiques de gestion, mais aussi de techniques non traditionnelles. Au cours de la prochaine année, nous continuerons de recenser des occasions de renforcer la capacité d'élaboration et de mise en oeuvre des stratégies au gouvernement fédéral.

- **Comptabilisation du développement durable.** Le chapitre 7, « Prendre les coûts environnementaux en compte », décrit l'évolution des besoins des organisations en ce qui concerne la comptabilisation et la communication de l'information. L'année prochaine, nous ferons enquête sur les nouvelles pratiques d'intégration des considérations environnementales et sociales aux décisions qui touchent les programmes et les politiques. De plus, nous travaillerons de concert avec les ministères en vue d'élaborer des mesures de la performance environnementale du gouvernement du Canada dans les secteurs suivants : approvisionnement écologique; gestion des déchets; consommation d'eau; consommation d'énergie dans les immeubles fédéraux; exploitation des parcs automobiles; gestion de l'utilisation des terres.

Faire participer les Canadiens : le processus de pétition

Le processus de pétition

65. Les modifications de 1995 à la *Loi sur le vérificateur général* ont aussi établi un processus de pétition. Celui-ci fournit aux Canadiens un moyen de communiquer leurs préoccupations au sujet de questions particulières liées à l'environnement et au développement durable qui relèvent de la compétence fédérale, et d'obtenir une réponse à ces préoccupations.

66. Aux termes de ce processus, une personne résidant au Canada peut faire parvenir une pétition au vérificateur général. Cette pétition est ensuite acheminée au ministre fédéral compétent qui doit répondre au signataire de la pétition. Le délai prévu pour la réponse est de 120 jours.

État d'avancement des pétitions reçues

67. Au 31 mars 1998, dix pétitions avaient été reçues et envoyées aux ministres pour réponse. Ces pétitions avaient trait à un certain nombre de questions, notamment l'évaluation environnementale, l'appauvrissement de la couche d'ozone, l'Accord multilatéral sur l'investissement et l'Accord pancanadien sur l'harmonisation environnementale. Des particuliers aussi bien que des organisations ont présenté des pétitions. L'annexe C contient de l'information sur la nature et l'état d'avancement des pétitions reçues.

68. Toutes les pétitions sauf une ont reçu une réponse dans les délais prescrits. La réponse à la pétition concernant le programme Travaux d'infrastructure Canada accusait un retard de trois mois.

l'environnement et le développement durable à ses activités de vérification, à la gestion de ses activités quotidiennes et à ses pratiques relatives aux ressources humaines. Le Bureau a comme objectif d'intégrer le développement durable à ses activités et à la manière de les exercer.

62. En conformité avec cet engagement, le vérificateur général a effectué, au cours de l'année écoulée, une série de vérifications des questions qui ont une importante composante liée à l'environnement et au développement durable (voir l'annexe A). Au cours de la prochaine année, nous étudierons d'autres questions, notamment :

- **Gestion des substances toxiques.** La vérification portera sur la gestion de la politique et des règlements sur les substances toxiques par les ministères fédéraux, y compris Environnement Canada et Santé Canada. De façon précise, nous examinerons comment les ministères fédéraux déterminent les substances qui peuvent être une source de préoccupation et comment ils établissent l'ordre de priorité. Nous tenterons aussi de déterminer si les programmes fédéraux de gestion des substances toxiques mènent à des décisions de gestion du risque qui favorisent le développement durable et si les ressources sont suffisantes pour prendre des décisions fondées sur des données scientifiques.

- **Efficacité des accords bilatéraux sur l'environnement.** Nous examinerons plus attentivement l'efficacité des accords bilatéraux sur l'environnement conclus entre les gouvernements fédéral et provinciaux, par exemple les accords sous le régime de la *Loi canadienne sur la protection de l'environnement* et de la *Loi sur les pêches.*

- **Engagements internationaux et l'Arctique.** L'année dernière, nous avons mis sur pied un programme de travaux continus afin d'évaluer la mesure dans laquelle le Canada respecte ses engagements internationaux dans le domaine de l'environnement (voir le chapitre 2, « Les engagements internationaux du Canada en matière d'environnement : une collaboration mondiale »). Cette année, nous examinerons les questions transfrontalières et le régime des accords internationaux qui ont une incidence sur le Nord du Canada.

- **Gestion axée sur la durabilité de l'industrie des mollusques et des crustacés de l'Atlantique.** Cette vérification portera sur la gestion, par le ministère des Pêches et des Océans, de l'industrie des mollusques et des crustacés de l'Atlantique. Nous examinerons la mesure dans laquelle ses pratiques de gestion contribuent au maintien d'une ressource durable sur le plan biologique et à l'utilisation durable de la ressource. Nous examinerons également la façon dont le Ministère partage sa responsabilité avec l'industrie et gère les activités qu'il conçoit pour assurer la viabilité économique des pêches au fil du temps.

- **Progrès de la stratégie fédérale en matière de sciences et de technologie.** Dans le cadre de l'examen continu de la stratégie fédérale en matière de sciences et de technologie, nous tenterons d'établir si la gestion de la science des changements climatiques reflète les principaux engagements de la stratégie.

- **Office national de l'énergie.** L'Office national de l'énergie doit assurer la protection de l'environnement au cours de la planification, de la construction, de l'exploitation, de l'entretien et de la cession des pipelines et des lignes d'énergie électrique interprovinciaux et internationaux. Notre vérification comprendra des observations sur certains aspects de la responsabilité de l'Office en relation avec les questions environnementales.

63. Nous ferons aussi le suivi des travaux antérieurs sur la gérance environnementale et les sites contaminés,

Le Bureau a comme objectif d'intégrer le développement durable à ses activités et à la manière de les exercer.

avons constaté que ces dernières étaient axées davantage sur les questions économiques et environnementales que sur la dimension sociale. Nous présenterons une évaluation plus complète de cette question.

Intégrer le quatrième « E » aux travaux du Bureau

61. La stratégie de développement durable du vérificateur général indique comment le Bureau intégrera

Pièce 7

Questions liées à l'environnement et au développement durable : notre plan de travail

Tâche	En 1998–1999	En 1999–2000
Stratégies ministérielles de développement durable	Effectuer les vérifications suivantes : • Processus de consultation pour les stratégies de développement durable • Mise en oeuvre des stratégies au cours de la première année Effectuer des études sur : • Les dimensions sociales, économiques et environnementales du développement durable	Publier un rapport sur les attentes du commissaire à l'égard des mises à jour des stratégies Effectuer les vérifications suivantes : • Mise en oeuvre des stratégies au cours de la deuxième année • Coordination interministérielle
Intégrer le quatrième « E » dans l'ensemble du Bureau du vérificateur général (L'argent a-t-il été dépensé en tenant dûment compte de l'économie, de l'efficience, de l'efficacité et de l'incidence environnementale?)	Effectuer les vérifications suivantes : • Gestion des substances toxiques • Efficacité des accords bilatéraux sur l'environnement • Engagements internationaux et l'Arctique • Gestion axée sur la durabilité de l'industrie des mollusques et des crustacés de l'Atlantique • Progrès de la stratégie fédérale en matière de sciences et de technologie • Office national de l'énergie Suivi de vérifications antérieures : • Gérance environnementale • Sites contaminés : coûts et passifs Mettre en oeuvre la stratégie de développement durable au Bureau du vérificateur général du Canada	Effectuer les vérifications suivantes : • Gestion des déchets dangereux à la Défense nationale • Saumon du Pacifique — Durabilité des pêches • Uniformiser les règles du jeu pour les sources énergétiques • Stratégie des industries environnementales Suivi de vérifications antérieures : • Mouvements transfrontaliers des déchets dangereux • Protection de la couche d'ozone • Gestion des déchets radioactifs fédéraux
Études spéciales	Effectuer les études suivantes : • La gestion axée sur le développement durable • Phase 2 de la comptabilisation du développement durable	Programme des études de 1999–2000 à déterminer
Pétitions	Surveillance au nom du vérificateur général	Surveillance au nom du vérificateur général

fédéral. À court terme, nous surveillerons particulièrement les efforts déployés par le gouvernement fédéral pour protéger l'environnement.

- Continuer de mettre l'accent sur les principales faiblesses de la gestion, par le gouvernement fédéral, des questions liées au développement durable que le Bureau du vérificateur général a décelées au cours des travaux précédents, et sur la mesure dans laquelle les ministères réussissent à les corriger. Ces faiblesses comprennent : l'écart entre les objectifs et la réalité, le manque de coordination et d'intégration des activités des ministères et d'autres administrations; les lacunes de l'examen du rendement [performance] et de l'information communiquée au Parlement.

57. Ces objectifs demeurent valables. Toutefois, bien que nos travaux aient initialement porté sur les efforts du gouvernement fédéral pour protéger l'environnement, il est temps d'élargir notre perspective pour inclure les dimensions économiques et sociales du développement durable.

58. La pièce 7 résume les principaux éléments de notre plan de travail pour les deux prochaines années.

Examen des stratégies de développement durable

59. Comme je l'ai déjà indiqué, 28 ministères et organismes fédéraux ont préparé leur première stratégie de développement durable et l'ont déposée à la Chambre des communes. Au cours des deux prochaines années, les ministères doivent relever trois défis importants :

1. **Mettre en oeuvre leur stratégie.** Les ministères ont fixé leurs objectifs et déterminé les mesures qu'ils doivent prendre pour les atteindre. Nous ferons rapport sur la mesure dans laquelle les ministères ont fait ce qu'ils ont dit qu'ils feraient.
2. **Établir des cibles claires et mesurables.** Nous avons recommandé que les ministères établissent une série de points de repère précis, afin de déterminer si les stratégies sont mises en oeuvre de façon satisfaisante, et qu'ils les présentent à la Chambre des communes au printemps de 1999. Je sais que c'est une mission difficile pour les ministères. Nous les aiderons à élaborer des indicateurs clés, surveillerons leur performance et ferons rapport à ce sujet.
3. **Se préparer pour la mise à jour des stratégies.** Les ministères sont tenus de mettre à jour leur stratégie au moins tous les trois ans, la première mise à jour devant être faite d'ici décembre de l'an 2000. Avant cette date, je présenterai un rapport spécial dans lequel je préciserai mes attentes à l'égard de la mise à jour des stratégies. Ce rapport contiendra les critères que mon personnel et moi-même retiendrons pour l'évaluation des stratégies mises à jour.

60. Au cours de la prochaine année, nous examinerons également deux questions importantes liées aux stratégies de développement durable.

- **Le processus de consultation.** Dans le cadre de la préparation des stratégies, nous avons demandé aux ministères d'obtenir les vues des clients, des partenaires et des parties intéressées sur les priorités ministérielles en matière de développement durable et sur la façon de les réaliser. Nous examinerons les processus utilisés par les ministères et nous les comparerons aux pratiques établies ainsi qu'aux attentes des ministères et des clients.

- **Les dimensions sociales, économiques et environnementales du développement durable.** Les stratégies nous informent sur la façon dont chacun des ministères perçoit le développement durable et sur les mesures qu'il entend prendre pour le promouvoir. Dans notre évaluation initiale des stratégies, nous

Mon personnel et moi-même avons une importante contribution à faire à ce processus « d'apprentissage et d'amélioration ».

à des rapports sur le développement durable.

51. À l'instar des premières stratégies de développement durable, les rapports d'entreprise initiaux avaient tendance à mettre surtout l'accent sur les aspects positifs de la performance environnementale de l'organisation. Mais à mesure que les organisations acquéraient de l'expérience et utilisaient un système de gestion qui appuyait leurs stratégies, leurs rapports accordaient un traitement plus large et plus en profondeur des questions auxquelles elles étaient confrontées et de la manière dont elles s'y prenaient pour les régler.

La plupart des stratégies ministérielles ne sont pas à la hauteur des meilleures pratiques dans le secteur privé.

52. Les sondages que SustainAbility Ltd. a effectués à l'échelle internationale sur les rapports environnementaux d'entreprise, au nom du Programme des Nations Unies pour l'environnement, indiquent que la qualité des rapports s'est beaucoup améliorée au fil du temps. Selon SustainAbility Ltd., à l'heure actuelle, les meilleurs rapports d'entreprise :

- traitent les trois dimensions du développement durable : économique, sociale et environnementale;
- mettent en évidence les questions clés qui se rattachent directement aux principales activités de la société ainsi qu'aux priorités qui ont été établies pour ces activités;
- présentent des indicateurs de la performance qui sont accompagnés de cibles précises, mesurables, atteignables et vérifiées.

53. Ce sont là les mêmes caractéristiques que nous espérons trouver dans une stratégie ministérielle de développement durable. À l'heure actuelle, la plupart des stratégies ne répondent pas à ces normes élevées. D'ici l'an 2000, je m'attends à ce que les ministères aient considérablement amenuisé cet écart.

54. À cette fin, ils devront travailler ensemble et apprendre les uns des autres. La préparation et la mise en oeuvre des stratégies de développement durable comportent un apprentissage intensif, et les ministères se trouvent à des étapes différentes de ce processus. Ils peuvent tirer profit d'un échange sur leurs expériences et d'une collaboration afin de trouver des solutions à leurs problèmes communs.

55. Tout au long du processus de préparation de sa stratégie de développement durable, Environnement Canada a tracé la voie en établissant une série de mécanismes ayant pour objet de promouvoir les échanges d'information et d'expériences entre les ministères. Les 28 stratégies de développement durable mettent en lumière la gamme des intérêts et des défis communs.

Prochaines étapes : notre plan de travail

56. Mon personnel et moi-même avons une importante contribution à faire à ce processus « d'apprentissage et d'amélioration ». Dans mon premier rapport, j'ai déterminé quatre objectifs devant servir à guider nos travaux au cours des prochaines années :

- Fournir des analyses et des recommandations objectives et indépendantes aux députés pour les aider à examiner les activités liées à l'environnement et au développement durable du gouvernement et à l'en tenir responsable.
- Travailler avec les ministères et les organismes fédéraux pour les aider à renforcer leur capacité de gérer les questions liées aux deux domaines en encourageant l'adoption des meilleures pratiques de gestion.
- S'occuper à la fois de protection de l'environnement et de développement durable, en insistant sur la prise de meilleures décisions au gouvernement

d'intégrer les considérations liées à l'environnement et au développement durable à la conduite de leurs activités. Dans le secteur privé, le lien entre la valeur d'une entreprise pour les actionnaires et l'environnement a beaucoup évolué au fil du temps. Le gouvernement fédéral peut tirer des leçons de l'expérience des organisations du secteur privé qui sont des chefs de file.

48. Dans un article publié en 1997 dans le *Harvard Business Review*, intitulé « Beyond Greening: Strategies for a Sustainable World », le professeur Stuart Hart affirme :

> Alors que les entreprises d'hier ne tenaient souvent aucun compte de l'incidence négative de leurs activités sur l'environnement et que les entreprises d'aujourd'hui visent une incidence nulle, les entreprises de demain doivent apprendre à avoir une incidence positive. [Traduction]

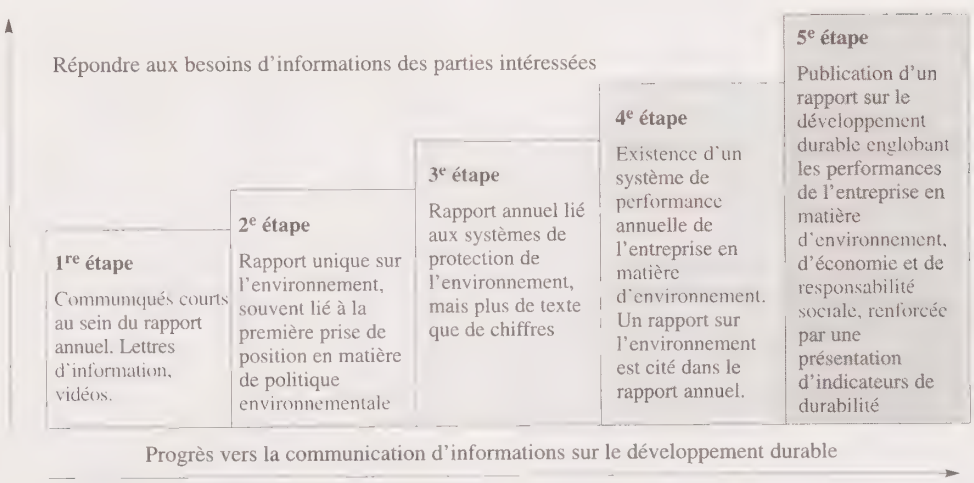
Les gouvernements doivent relever le même défi

49. Afin de répondre aux pressions exercées par les organismes de réglementation, les clients, les fournisseurs, les groupes écologistes et le grand public, les gestionnaires d'entreprise se dotent d'outils pour réduire l'impact environnemental de leurs activités ainsi que l'utilisation des ressources. Les tendances relevées dans les rapports environnementaux d'entreprise et la mise en place de systèmes de gestion de l'environnement sont des indicateurs importants des changements en cours dans le secteur privé.

50. La pièce 6 illustre l'évolution des rapports sur l'environnement et le développement durable des entreprises. La quantité et la qualité des analyses et de l'information qui sous-tendent ces rapports ont tendance à augmenter et à s'améliorer à mesure que les organisations passent des « publications vertes de luxe »

Pièce 6

Évolution vers la communication d'informations sur le développement durable



Source : Institut Canadien des Comptables Agréés, *L'information sur la performance environnementale*, 1994

Pièce 5 (suite)

Ministère	Objectif du Ministère	Thèmes de la stratégie de développement durable
Travaux publics et Services gouvernementaux Canada	Faire fructifier au maximum l'argent des contribuables affecté aux services communs et centraux, qui sont dispensés aux ministères, organismes, et autres clients en tenant compte des principes essentiels de circonspection, de probité et de transparence de l'État.	• Écologiser ses services communs et ses opérations internes • Appuyer le développement durable par l'amélioration continue dans les secteurs suivants : – approvisionnement – gestion du parc automobile – gestion des déchets – conservation de l'eau – efficacité énergétique – gestion de l'utilisation des terres

Source : Les objectifs des ministères sont tirés du *Budget des dépenses* de 1998–1999. Les thèmes de la stratégie de développement durable sont tirés des stratégies des ministères.

déterminer si la stratégie est mise en oeuvre avec succès.

- Bon nombre des stratégies s'en tiennent au statu quo plutôt qu'à un engagement de changer afin de mieux protéger notre environnement et de promouvoir le développement durable.

44. Je crois qu'il faut corriger rapidement la première faiblesse. Le vérificateur général a souvent dit qu'une bonne information est essentielle à la reddition de comptes, que ce soit lorsque les parlementaires votent les dépenses annuelles, examinent les priorités et les plans des années futures ou analysent le rendement passé. En tant qu'électeurs, les Canadiens ont aussi besoin d'une bonne information pour exiger du gouvernement qu'il rende des comptes. Les ministères ont besoin d'une bonne information pour déterminer si leur stratégie est efficace et si des mesures correctives sont nécessaires. Et j'ai besoin d'une bonne information pour m'acquitter de mes responsabilités envers le Parlement, lesquelles consistent à évaluer les progrès des ministères et à faire rapport à ce sujet.

45. La deuxième faiblesse — à savoir que les stratégies ministérielles avaient tendance à être centrées davantage sur les réalisations antérieures et le statu quo que sur le changement et les orientations futures — devra être corrigée au fil du temps. Les stratégies seront mises à jour d'ici décembre 2000; je m'attends à ce que les ministères accordent plus d'attention à ce qu'ils feront différemment pour promouvoir le développement durable. Et je suis persuadé qu'il y aura une amélioration importante de la qualité des prochaines stratégies.

Le développement durable n'est pas un état que nous pouvons atteindre par un seul coup de collier. Il exige un apprentissage, des améliorations et des innovations.

Apprendre les uns des autres

46. Le développement durable a souvent été décrit comme un processus d'apprentissage. Dans le *Guide de l'écogouvernement*, le gouvernement fédéral indique ceci :

> Le développement durable n'est pas un état que nous pouvons atteindre par un seul coup de collier. Il est nécessaire de procéder étape par étape, par des améliorations continues et toujours plus poussées, pour réaliser des progrès mesurables.

47. Je suis d'accord. Les organisations du secteur public ne sont pas les seules à chercher le meilleur moyen

Pièce 5

Six stratégies de développement durable clés

Ministère	Objectif du Ministère	Thèmes de la stratégie de développement durable
Environnement Canada	Concrétiser l'idée du développement durable au Canada, en aidant les générations actuelles et futures de Canadiens à vivre et à prospérer dans un environnement qu'il y a lieu de respecter, de protéger et de conserver.	• Accroître sa capacité d'atteindre les buts du développement durable • Mieux savoir faire comprendre les avantages du développement durable • Fournir aux Canadiens les instruments dont ils ont besoin pour prendre de bonnes décisions dans un environnement changeant • Donner l'exemple pour l'écologisation des opérations du gouvernement
Ministère des Finances	Élaborer des politiques appropriées et fournir des conseils judicieux concernant la situation économique, sociale et financière ainsi que le programme d'action du gouvernement; administrer de façon responsable les obligations et souscriptions financières internationales; financer de manière économique le programme de la monnaie canadienne; financer de manière responsable les projets spéciaux et assurer de manière efficace et efficiente l'administration du Ministère.	• Intégrer l'économie et l'environnement • Bâtir l'avenir • Participer à l'économie mondiale • Écologiser les opérations
Ministère des Affaires étrangères et du Commerce international	Agir au nom de tous les Canadiens pour accroître la prospérité économique, l'emploi et la sécurité et travailler à la promotion de la paix dans le monde en diffusant la culture et les valeurs canadiennes.	• Croissance économique et prospérité • Consolidation de la paix et de la sécurité • Valeurs et culture canadiennes • Activités d'écologisation
Industrie Canada	Encourager la compétitivité internationale et l'excellence dans l'industrie, les sciences et la technologie dans toutes les régions du Canada, favoriser le développement économique régional en Ontario, faciliter l'essor des entreprises autochtones, veiller au fonctionnement équitable et efficace du marché au Canada, et établir des règles du marché et faire en sorte qu'elles soient efficacement mises en application.	• Créer au Canada un climat du marché qui favorise le développement durable • Améliorer la capacité des entreprises canadiennes à développer et à utiliser des technologies et des outils novateurs qui contribuent au développement durable • Encourager les échanges commerciaux et les investissements qui contribuent au développement durable au Canada et à l'étranger • Continuer à améliorer la capacité d'Industrie Canada à gérer et à mettre en oeuvre ses politiques, ses programmes et ses activités qui contribuent au développement durable
Ressources naturelles Canada	Contribuer à l'essor économique du Canada en fournissant aux Canadiens et aux Canadiennes des connaissances scientifiques et économiques d'expert, et en favorisant le développement durable et l'exploitation rationnelle des ressources naturelles ainsi que la compétitivité des industries de l'énergie, des forêts, des minéraux et métaux et de la géomatique.	• Prendre des décisions plus judicieuses • Améliorer les retombées socio-économiques à long terme • Maintenir un environnement sain et sécuritaire • Prêcher par l'exemple

Les ministères doivent s'efforcer d'intégrer de façon plus systématique des considérations environnementales, économiques et sociales à l'ensemble de leurs activités.

36. Cependant, il est possible de relever ces défis. Nous pouvons faire mieux. Par exemple, le Canada a respecté et, parfois plus que respecté, ses obligations prévues par le *Protocole de Montréal relatif à des substances qui appauvrissent la couche d'ozone*. Les réalisations canadiennes se comparent aussi favorablement à celles d'autres pays quant à l'influence exercée et à la mise en oeuvre du programme international.

Un nouvel outil pour l'écologisation du gouvernement du Canada — les stratégies de développement durable

37. La gestion de ces questions, par le gouvernement fédéral, suscitait des inquiétudes et c'est pourquoi on a créé, en 1995, une série d'outils pour l'aider à progresser sur la voie du développement durable. En vertu de modifications à la *Loi sur le vérificateur général*, les ministères ont été tenus de préparer des stratégies et des plans d'action pour promouvoir le développement durable.

38. J'ai de grandes attentes à l'égard de ces stratégies. Le gouvernement fédéral a énormément d'influence sur les projets environnementaux et de développement durable du Canada. Il est la plus grande entreprise au pays et il partage la responsabilité de l'établissement du cadre juridique qui influe sur la façon dont nous utilisons l'environnement; de plus, il fournit une gamme de services et de programmes qui contribuent au bien-être des Canadiens sur les plans social, économique et environnemental.

39. Vingt-huit ministères et organismes ont maintenant préparé leur stratégie de développement durable et l'ont déposée à la Chambre des communes — 24 ministères qui étaient tenus de le faire, comme le prévoit la Loi, et quatre autres organisations fédérales qui l'ont préparée volontairement. En ma qualité de commissaire à l'environnement et au développement durable, une importante partie de mon travail consiste à évaluer ces stratégies et à présenter mes constatations à la Chambre des communes.

40. Au moyen de leur stratégie de développement durable, tous les ministères doivent s'efforcer d'intégrer de façon plus systématique des considérations environnementales, économiques et sociales à l'ensemble de leurs activités, c'est-à-dire à leurs politiques, programmes et activités quotidiennes. La pièce 5 résume les objectifs ministériels actuels et les thèmes de six stratégies de développement durable clés.

41. Lors de notre premier examen des stratégies ministérielles, nous avons posé une simple question : « Les ministères ont-ils fait ce qu'on leur a demandé? » Nous avons constaté que la plupart d'entre eux avaient fait la plus grande partie de ce qu'on leur avait demandé. Ils ont décrit leurs mandats et activités actuels, consulté les parties intéressées et établi des buts et des objectifs.

42. Nous savons enfin comment chacun des ministères perçoit le développement durable et quelles mesures il entend prendre pour le promouvoir. La préparation des stratégies a aussi eu pour effet de sensibiliser davantage les ministères aux questions relatives au développement durable.

43. Toutefois, notre examen a aussi révélé des faiblesses au niveau des stratégies, dont deux ont une importance vitale :

- Presque tous les ministères ont omis de fixer des cibles claires, dont ils pourraient se servir eux-mêmes, ainsi que les parlementaires et le public, pour

médicaments, des variétés végétales et d'autres produits.

30. La Stratégie canadienne de la biodiversité a été élaborée pour respecter les engagements pris par le Canada en vertu de la *Convention sur la diversité biologique* de 1992. Le Canada a été l'un des premiers pays à ratifier la Convention, mais il a tardé à l'appliquer. Cinq ans plus tard, un plan global de mise en application — outil essentiel de coordination des efforts au sein des gouvernements fédéral, provinciaux et territoriaux — n'a pas encore été élaboré.

Des déchets dangereux aux pêches de l'Atlantique et du Pacifique

31. Dans mon rapport de 1997 à la Chambre des communes, qui était fondé sur dix années de travaux du vérificateur général, j'ai relevé trois principales faiblesses dans la gestion, par le gouvernement fédéral, des questions liées à l'environnement et au développement durable :

- un écart entre les engagements et les mesures concrètes;
- un manque de coordination entre les ministères et les administrations;
- des lacunes au niveau de l'examen du rendement [performance] et de l'information communiquée au Parlement.

32. En plus des travaux présentés dans ce rapport, le vérificateur général a, au cours de l'année écoulée, examiné une série d'autres questions liées à ces deux domaines (voir l'annexe A). Ces rapports appuient davantage l'idée que le gouvernement doit accorder plus d'attention à l'aspect gestion de l'équation du développement durable.

33. Le problème est attribuable en partie au fait que des données importantes nécessaires à la prise de décisions ne sont pas communiquées ou sont incomplètes. Par exemple :

- Nous ne savons pas dans quelle mesure le Canada remplit ses obligations internationales visant à prévenir le trafic illicite de déchets dangereux à la frontière.
- Nous ne connaissons pas quelle est, ou quelle pourrait être, la contribution de la série des initiatives actuelles d'efficacité énergétique à l'atteinte du but que s'est fixé le Canada en matière de stabilisation des émissions de gaz à effet de serre.
- Nous ne connaissons pas la pleine étendue des passifs environnementaux du gouvernement du Canada, et celui-ci n'a pas reconnu ces passifs dans ses états financiers parce qu'ils sont difficiles à définir et à estimer.
- Nous ne connaissons pas l'incidence de la perte d'habitat sur le saumon de la côte du Pacifique.

34. Parfois, il n'y a pas d'orientation claire. Par exemple, le plan d'activités de l'Administration du rétablissement agricole des Prairies ne fournit pas de définition claire de l'orientation stratégique par rapport aux grands enjeux actuels et prévisibles de la gestion des terres et de l'eau qui entravent le rétablissement des terres agricoles des Prairies. Il ne définit pas quels sont les résultats escomptés, dans quelle zone ils doivent être obtenus ni dans quel laps de temps.

35. Parfois, l'orientation peut être claire, mais la mise en oeuvre est sacrifiée au profit d'autres objectifs. Par exemple, bien que l'on ait dépensé plus de trois milliards de dollars de fonds nouveaux et réaffectés pour soutenir l'industrie du poisson de fond, y compris une somme de 1,9 milliard de dollars dans le cadre de la Stratégie du poisson de fond de l'Atlantique, l'industrie fait face aux mêmes problèmes. Il faut trouver d'autres moyens de réagir aux problèmes sociaux et culturels des collectivités côtières.

Le gouvernement fédéral doit accorder plus d'attention à l'aspect gestion de l'équation du développement durable.

des Nations Unies sur les changements climatiques qui a été signée à Rio, quelques-uns seulement d'entre eux devraient atteindre, d'ici l'an 2000, les cibles actuelles, non imposées, de réduction des gaz à effet de serre aux niveaux de 1990. La Conférence de Kyoto tenue en décembre 1997 avait pour but d'accélérer la prise de mesures à l'échelle internationale aux termes de la Convention (voir la pièce 4). Le niveau que les parties ont fixé pour notre pays d'ici 2008–2012, est de six pour cent inférieur aux niveaux de 1990. Il faut palier les défaillances de la gestion liées au Programme d'action national actuel si le Canada veut atteindre les cibles de Kyoto.

La biodiversité au Canada : le temps presse

29. La diversité biologique — ou la biodiversité — fait référence à l'énorme variabilité de la vie végétale et animale présente dans l'environnement naturel. La perte de diversité biologique menace l'équilibre de la nature qui soutient la vie, et prive l'humanité des substances nécessaires pour produire de nouveaux

Pièce 4

La Conférence de Kyoto sur les changements climatiques

À Kyoto, les pays ont approuvé un Protocole juridiquement contraignant en vertu duquel les pays industrialisés réduiront leurs émissions collectives de gaz à effet de serre de 5,2 p. 100 d'ici 2008–2012. Ce taux a été calculé selon une moyenne sur ces cinq ans. Les Nations Unies estiment que, comparativement aux niveaux d'émissions auxquels on pourrait s'attendre d'ici 2010 sans la prise de mesures supplémentaires, la cible visée par le Protocole représente une réduction de 30 p. 100.

La réduction de 5,2 p. 100 comporte différentes cibles pour divers pays.

- La Suisse et de nombreux États de l'Europe centrale et de l'Est réduiront leurs émissions de huit pour cent. L'Union européenne atteindra la même cible en répartissant différents taux de réduction à ses États membres.
- Les États-Unis réduiront leurs émissions de sept pour cent.
- Le Canada, la Hongrie, le Japon et la Pologne ont établi leur cible à six pour cent.
- La Russie, la Nouvelle-Zélande et l'Ukraine doivent stabiliser leurs émissions.
- Il est possible que les émissions augmentent jusqu'à un pour cent, huit pour cent et dix pour cent en Norvège, en Australie et en Islande respectivement.

L'entente accorde aux pays une certaine souplesse quant à la manière dont ils réduisent leurs émissions et les mesurent. En particulier :

- un « mécanisme de développement propre » permettra aux pays industrialisés de financer les projets de réduction des émissions dans les pays en développement, ainsi que d'en avoir le mérite;
- un régime international d'« échange de droits d'émission » sera mis en place afin de permettre aux pays industrialisés d'acheter et de vendre entre eux les crédits d'émissions excessives;
- l'équation tiendra compte, en plus des réductions dans les divers secteurs industriels et économiques, des émissions de dioxyde de carbone causées par la déforestation et des réductions de dioxyde de carbone attribuables aux arbres récemment plantés (qui agissent comme des « puits » de carbone en absorbant le dioxyde de carbone présent dans l'atmosphère).

Les détails opérationnels de ces mesures doivent encore être élaborés.

Le Protocole pourra être signé pour un an à partir du 16 mars 1998. Il entrera en vigueur après sa ratification par au moins 55 pays représentant 55 p. 100 des émissions totales de 1990 des pays industrialisés.

Source : D'après les données obtenues du Centre d'information des Nations Unies

que ce transport à grande distance de contaminants est considéré de plus en plus comme étant la plus grande menace pour la qualité de l'environnement de l'Arctique.

20. Les pays ont reconnu cette intensification de l'interdépendance à l'échelle mondiale et ils ont réagi en préparant une gamme variée d'accords internationaux sur l'environnement. Afin de protéger ses intérêts nationaux, le Canada a été l'un des instigateurs clés du programme international.

21. En adhérant à ces accords, le Canada a pris des engagements envers la communauté internationale. En retour, nous tirons parti de ceux que prennent d'autres pays. Un des principes fondamentaux du droit international veut que les pays s'acquittent de bonne foi de leurs obligations internationales et les traduisent par des mesures significatives sur le plan intérieur.

22. Comment nous acquittons-nous de nos engagements?

Le défi que posent les changements climatiques

23. Le climat de la Terre a fluctué de façon marquée au cours de son histoire. Depuis la dernière période glaciaire, il y a 10 000 ans, il est cependant demeuré assez stable. Les gaz à effet de serre qui se forment naturellement dans l'atmosphère — constitués principalement de vapeur d'eau, de dioxyde de carbone et de méthane — ont fait augmenter de quelque 33 degrés la température de la Terre et ont ainsi contribué au maintien de la vie sur la planète.

24. Toutefois, de nombreux scientifiques ont conclu que les activités menées par l'homme au cours des deux derniers siècles — depuis le début de la Révolution industrielle, — notamment la déforestation et la combustion du charbon, du pétrole et du gaz naturel, ont accru la présence des gaz à effet de serre dans l'atmosphère et contribué au réchauffement du climat. Ces gaz peuvent modifier le climat, causant plus de vagues de chaleur, de tempêtes de pluie et d'inondations, ainsi que des périodes de sécheresse plus longues.

25. Partout dans le monde, les gouvernements sont confrontés à une nouvelle génération de problèmes liés au développement durable, dont les changements climatiques constituent peut-être le problème le plus grave. Celui–ci porte, entre autres, sur la façon de produire et de consommer l'énergie et il est au coeur de la manière dont nous menons et gagnons notre vie. Cette dimension économique, conjuguée aux complexités et aux incertitudes qui se rattachent à la science des changements climatiques, donne amplement matière à un débat passionné sur la façon dont le Canada doit réagir à cette menace.

On s'attend à ce que les pays s'acquittent de bonne foi de leurs obligations internationales et à ce qu'ils les traduisent par des mesures significatives sur le plan intérieur.

26. En 1990, le Canada s'est engagé à stabiliser, à l'échelle nationale et d'ici l'an 2000, les émissions de gaz à effet de serre aux niveaux de 1990. Le Programme d'action national concernant les changements climatiques, créé en 1995, est le principal programme dans le cadre duquel les ministres fédéraux, provinciaux et territoriaux de l'énergie et de l'environnement ont convenu de collaborer à l'atteinte du but que s'est fixé le Canada en matière de stabilisation. Cependant, selon l'évaluation même du gouvernement fédéral, les émissions de gaz à effet de serre du Canada ne sont pas en voie de se stabiliser; elles empruntent plutôt la mauvaise direction.

27. À mon avis, la mise en oeuvre du Programme d'action national n'est pas bien gérée. Les rôles et les responsabilités ne sont pas attribués clairement, le public n'est pas sensibilisé à l'échelle nationale, et il n'y a ni programme d'éducation et de sensibilisation ni plan de mise en oeuvre.

28. Le Canada n'est pas le seul pays à ne pas tenir ses promesses. Bien que 166 pays aient ratifié la *Convention-cadre*

Canadiens. Les questions telles que la pollution atmosphérique, la détérioration de la couche d'ozone, les changements climatiques et l'appauvrissement des pêches en mer ne connaissent pas de frontières.

19. L'exemple de l'Arctique montre bien que le Canada est vulnérable face au comportement de ses voisins. Pour beaucoup de Canadiens, l'Arctique représente un environnement vierge. Ceux qui y vivent trouvent que ce n'est pas le cas. La pollution parcourt des milliers de kilomètres à partir de l'Europe, de l'Asie et de l'Amérique du Nord. Le rapport d'Environnement Canada intitulé *L'État de l'environnement au Canada* conclut

Pièce 3

Résolution adoptée par l'Assemblée générale des Nations Unies – Programme relatif à la poursuite de la mise en oeuvre d'Action 21

Énoncé d'engagement – le 19 septembre 1997

1. Réunis à l'occasion de la dix–neuvième session extraordinaire de l'Assemblée générale, nous, chefs d'État ou de gouvernement et autres chefs de délégation, nous sommes réunis, avec nos partenaires des institutions internationales et des organisations non gouvernementales, pour examiner les progrès accomplis depuis que s'est tenue il y a cinq ans la Conférence des Nations Unies sur l'environnement et le développement, et pour réaffirmer notre engagement de continuer à agir pour atteindre les buts et les objectifs définis par le Sommet Planète Terre.
2. La Conférence des Nations Unies sur l'environnement et le développement a été un événement historique. Nous y avions lancé un nouveau partenariat mondial pour le développement durable – un partenariat qui respecte le caractère indissociable de la protection de l'environnement et du processus de développement et qui traduit une unité de vues à l'échelon mondial et représente un engagement politique pris au plus haut niveau. Adopté à Rio, Action 21 traite des problèmes urgents de l'environnement et du développement mais vise aussi à préparer le monde à la grande tâche du développement durable au siècle prochain.
3. Notre premier souci, à cette session extraordinaire, a été d'accélérer de façon cohérente la mise en oeuvre d'Action 21 et non de renégocier ses dispositions ou de sélectionner celles à mettre en oeuvre. Nous réaffirmons qu'Action 21 demeure bien le programme d'action fondamental pour réaliser le développement durable. Nous réaffirmons tous les principes que renferme la Déclaration de Rio sur l'environnement et le développement, ainsi que les Principes relatifs aux forêts. Nous sommes convaincus que pour réaliser le développement durable, il faut intégrer ses différentes composantes économiques, environnementales et sociales. Nous réaffirmons notre volonté de travailler ensemble – dans l'esprit du partenariat mondial – pour tenter de satisfaire équitablement les besoins des générations présentes et futures.
4. Nous reconnaissons qu'un certain nombre de résultats encourageants ont été obtenus, mais nous constatons avec une profonde inquiétude que, pour ce qui est du développement durable, les perspectives d'ensemble sont plus sombres aujourd'hui qu'en 1992. Nous soulignons que la mise en oeuvre cohérente d'Action 21 demeure d'une importance vitale et est plus urgente que jamais.
5. Le temps presse, si nous voulons relever les défis du développement durable tels qu'ils sont définis dans la Déclaration de Rio et dans Action 21. À cette fin, nous renouvelons notre engagement de participer au partenariat mondial instauré à la Conférence des Nations Unies sur l'environnement et le développement et notre volonté de poursuivre une concertation et une action continues inspirées par l'idée qu'il faut rendre l'économie mondiale à la fois plus efficace et plus équitable, car c'est le moyen de créer un climat international propice à la réalisation des objectifs d'environnement et de développement. Nous nous engageons donc à poursuivre de bonne foi et dans un esprit de partenariat le travail que nous avons mené ensemble pour accélérer la mise en oeuvre d'Action 21. Nous invitons chacun, dans le monde, à se joindre à nous dans la défense de cette cause commune.
6. Nous nous engageons à faire en sorte que le prochain examen d'ensemble de la mise en oeuvre d'Action 21, en 2002, fasse apparaître davantage de progrès mesurables sur la voie du développement durable. Le présent programme relatif à la poursuite de la mise en oeuvre d'Action 21 est le moyen que nous avons choisi pour y parvenir. Nous nous engageons à l'appliquer intégralement.

Source : Département des affaires économiques et sociales des Nations Unies

Pièce 2

Cinq ans après Rio : où en sommes-nous?

Questions liées au développement durable à l'échelle mondiale

Pauvreté : les écarts entre les riches et les pauvres continuent de s'accentuer, tant au sein des pays qu'entre ceux-ci. Selon certains, cette situation serait attribuable à la mondialisation. Les pays les plus pauvres sont davantage marginalisés. Plus de 1,1 milliard de personnes — 20 p. 100 de la population mondiale — vivent dans une pauvreté absolue, avec l'équivalent de moins d'un dollar par jour.

Consommation et production : vingt pour cent des habitants de la planète continuent de consommer 80 p. 100 de ses ressources. Certains grands pays en développement adoptent rapidement des modes de vie davantage axés sur la consommation.

Population : les taux de fécondité baissent plus rapidement que prévu dans la plupart des régions. D'après les dernières projections, de nombreux pays en développement stabiliseront leur population d'ici une ou deux générations. Certains pays sont encore aux prises avec des taux de croissance démographique élevés qui épuisent les ressources naturelles.

Forêts : malgré une récente tendance à la baisse, la perte de forêts se poursuit à un taux inacceptable. Au total, on coupe ou on brûle chaque année 13,7 millions d'hectares de forêts — soit à peu près la superficie du Népal.

Eau douce : le tiers des habitants de la planète vit dans des pays qui font face à des pénuries d'eau allant de modérées à graves; d'ici l'an 2025, ce chiffre pourrait atteindre les deux tiers, à moins que des mesures soient prises. Un cinquième de l'humanité n'a pas accès à de l'eau potable, et la moitié n'a pas d'installations sanitaires adéquates.

Océans : la pollution marine — dont 80 p. 100 est causée par des activités terrestres — menace la santé et les moyens d'existence des deux tiers des gens qui vivent dans les régions côtières. Quelque 60 p. 100 des stocks mondiaux de poisson font l'objet d'une surpêche ou d'une pêche intensive, d'où la nécessité de prendre de toute urgence des mesures pour éviter leur épuisement.

Climat : les émissions globales de dioxyde de carbone et des autres gaz à effet de serre continuent de s'accroître. Selon un rapport présenté en 1995 par un groupe de scientifiques des Nations Unies, la prépondérance de la preuve suggère « une influence humaine perceptible sur le climat mondial ».

Énergie : l'utilisation de combustible fossile dans les pays industrialisés se stabilise lentement, mais de nombreuses émissions polluantes sont en hausse. La croissance rapide de l'utilisation de combustible fossile dans beaucoup de pays en développement conduit à de graves problèmes de pollution. On prévoit que la consommation d'énergie mondiale fera plus que doubler d'ici 2050. Plus de deux milliards de personnes, qui habitent pour la plupart dans les régions rurales de pays en développement, n'ont pas accès aux services énergétiques commerciaux.

Terres : la production alimentaire mondiale est en progression constante, mais plus de 800 millions de personnes souffrent toujours de la faim et de malnutrition. L'utilisation de pesticides et de mauvaises méthodes de production agricole ont laissé des traces profondes : 300 millions d'hectares de terres agricoles à l'échelle de la planète sont maintenant fortement dégradées et les activités agricoles sont délaissées. À cela s'ajoute 1,2 milliard d'hectares de terres qui affichent une perte de fertilité modérée. La désertification (dégradation des terres non irriguées) touche le quart de la surface émergée de la Terre — soit 3,6 milliards d'hectares.

Substances toxiques : les produits chimiques toxiques et les déchets radioactifs continuent de présenter des menaces importantes pour la santé humaine et les écosystèmes. On estime que trois millions de tonnes de déchets toxiques et dangereux traversent les frontières nationales chaque année.

Biodiversité : le taux actuel d'extinction des espèces et de perte d'habitat est sans précédent. Selon une estimation conservatrice, 50 000 espèces végétales et animales seront vraisemblablement perdues chaque année au cours des prochaines décennies.

Financement : en dépit des promesses d'augmentation de l'aide au développement durable faites au Sommet de la Terre par les pays développés, l'aide au développement officielle a régressé; en effet, elle est passée d'une moyenne de 0,34 p. 100 du produit national brut (PNB) du pays donateur, en 1992, à 0,27 p. 100, en 1995. L'objectif des Nations Unies communiqué à Rio est de 0,7 p. 100 du PNB.

Transfert de technologies : les pays en développement ont besoin de toute urgence d'un plus grand accès aux technologies sûres pour l'environnement, afin de se développer de façon durable. La plupart des technologies écologiques sont détenues par le secteur privé et leur accès est tributaire du marché.

Institutions internationales : le nombre d'organismes qui établissent les politiques dans le domaine du développement durable est en hausse continue, et c'est pourquoi il est nécessaire d'améliorer leur coordination et leur collaboration. La crise financière permanente qui afflige les agences et les programmes des Nations Unies rend plus difficile le respect des mandats initiaux et de ceux qui découlent de Rio.

Participation : le Sommet de la Terre a recensé neuf « groupes principaux » dont la participation active est nécessaire pour assurer le développement durable. Ces groupes sont : les femmes; les enfants et les jeunes; les populations autochtones; les organisations non gouvernementales; les représentants locaux comme les maires; les travailleurs et les syndicats; les entreprises et l'industrie; les scientifiques; les agriculteurs.

Source : Département de l'information des Nations Unies — DPI/SD/1910 — juin 1997

- la surutilisation des ressources renouvelables, en particulier l'eau douce, les forêts, la terre arable et les pêches;

- le nombre grandissant de personnes qui vivent dans la pauvreté, et la progression de l'écart entre les riches et les pauvres, tant à l'intérieur des pays qu'entre ceux-ci.

16. Les États membres, dont le Canada, se sont engagés à veiller à ce que le prochain examen complet, en l'an 2002 — dix ans après Rio — fasse état de progrès mesurables plus importants au regard de l'atteinte de l'objectif de développement durable (voir la pièce 3).

Travailler à l'échelle mondiale et au pays

17. L'enjeu est de taille. Le Canada est intimement lié — tant sur le plan économique que sur le plan écologique — au reste du monde. La qualité de notre environnement dépend non seulement du comportement des Canadiens, mais aussi et de plus en plus, des activités qui se déroulent à l'extérieur des frontières nationales.

18. Les courants atmosphériques et océaniques, qui transportent des polluants provenant d'autres pays, ont une incidence directe sur la santé et le bien-être des

Pièce 1

Le Sommet Planète Terre tenu à Rio en 1992 : Sur quoi s'est-on entendu?

Déclaration de Rio sur l'environnement et le développement. La Déclaration précise que les pays ont le droit d'exploiter leurs propres ressources selon leurs propres politiques environnementales et de développement et qu'il leur incombe de veiller à ce que les activités qui relèvent de leur compétence ou de leur contrôle ne causent pas de dommages à l'environnement d'autres pays. La Déclaration contient des exigences formulées au moyen de 27 principes qui portent, entre autres, sur l'équité entre les générations, la collaboration entre les pays, la participation du public, l'utilisation du principe de précaution dans la prise de décisions et l'adoption du principe du « pollueur-payeur ».

Action 21. Action 21 est un programme visant à réaliser le développement durable pour le XXI^{e} siècle sur les plans social, économique et environnemental. Le document de 300 pages traite les dimensions sociales et économiques du développement durable, la conservation et la gestion des ressources, le renforcement du rôle des groupes principaux et les moyens de mise en oeuvre.

Convention-cadre des Nations Unies sur les changements climatiques. La Convention établit un cadre et un processus d'entente sur des mesures particulières de lutte contre les changements climatiques. Elle fixe comme objectif ultime la stabilisation des concentrations de gaz à effet de serre dans l'atmosphère à un niveau qui préviendrait une interférence anthropique dangereuse pour le système climatique. Ce niveau doit être obtenu dans un délai suffisant pour permettre aux écosystèmes de s'adapter naturellement aux changements climatiques, afin d'éviter que la production alimentaire soit menacée et de permettre le développement économique durable. La cible pour les pays membres de l'Organisation de coopération et de développement économiques de même que pour douze « économies en transition » (Europe centrale et de l'Est et ex-Union soviétique), consisterait à ramener, d'ici l'an 2000, les niveaux des émissions de gaz à effet de serre à ceux de 1990.

La *Convention sur la diversité biologique.* Les objectifs de la Convention sont les suivants : conserver les espèces biologiques, les ressources génétiques, les habitats et les écosystèmes; assurer l'utilisation durable des matières vivantes; assurer le partage juste et équitable des avantages qui découlent des ressources génétiques. La Convention comprend une exigence selon laquelle les pays adoptent des règlements aux fins de la conservation de leurs ressources biologiques, et se chargent de fournir les fonds et la formation, ainsi que de transférer la technologie aux pays en développement pour les aider à appliquer la Convention.

Énoncé des principes concernant les forêts. La déclaration de principes contraignants a trait à la gestion, à la conservation et au développement durable de tous les types de forêts. Elle indique que les ressources forestières doivent être gérées de manière à répondre aux besoins sociaux, économiques, écologiques, culturels et spirituels des générations actuelles et futures, besoins qui se rattachent non seulement aux produits de la forêt, mais aussi à l'habitat faunique, aux loisirs, etc.

Source : D'après l'information fournie par le Département des affaires économiques et sociales des Nations Unies

Introduction

9. Les Canadiens ont été parmi les premiers à reconnaître l'interdépendance entre l'homme et son environnement naturel. Nous avons atteint un niveau élevé de développement humain et nous avons réussi à assainir notre environnement dans certains secteurs. Cependant, il nous reste encore de nombreux défis à relever, le plus important étant de joindre le geste à la parole.

10. Dans ce deuxième rapport à la Chambre des communes, je souligne la nécessité pour le gouvernement fédéral d'accorder une plus grande attention à l'aspect gestion de l'équation du développement durable. Mon personnel et moi-même croyons que l'application de saines pratiques de gestion peut contribuer de façon significative à améliorer la protection de l'environnement et la promotion du développement durable.

Un engagement mondial renouvelé à l'égard du développement durable

11. En 1992, Rio de Janeiro était le site de la Conférence des Nations Unies sur l'environnement et le développement, mieux connue sous le nom de Sommet de la Terre. Le Sommet avait pour but d'élaborer un plan pour traiter les questions relatives à l'environnement et au développement, maintenant et au XXI^{e} siècle. Plus de 30 000 personnes y ont assisté, dont des représentants de 179 pays. Les espoirs et les attentes étaient grands.

12. Au terme de la Conférence, 105 chefs d'État se sont réunis pour manifester leur engagement à l'égard du développement durable — développement en harmonie avec la nature et les besoins des générations actuelles et futures. Le Sommet de la Terre constituait la plus grande rencontre de dirigeants nationaux de l'histoire. Ceux-ci ont signé la *Convention-cadre des Nations Unies sur les changements climatiques* et la *Convention sur la diversité biologique,* et approuvé la *Déclaration de Rio* et une série de *Principes concernant les forêts.* Ils ont également adopté un plan de 300 pages, *Action 21*, visant la réalisation du développement durable (voir la pièce 1).

13. Cinq ans plus tard, en juin 1997, le Canada s'est joint à plus de 165 pays au cours d'une session extraordinaire de l'Assemblée générale des Nations Unies consacrée à l'évaluation des progrès accomplis depuis le Sommet de la Terre et à l'établissement des priorités futures.

14. Pour se préparer à la session, le personnel des Nations Unies a examiné les progrès accomplis à l'égard d'un large éventail de questions liées au développement durable (voir la pièce 2). À cette session, les pays membres ont reconnu que certains progrès avaient été réalisés au cours des cinq dernières années. Par exemple :

- la croissance de la population mondiale ralentit;
- la production alimentaire est en hausse;
- la plupart des gens vivent plus longtemps et sont en meilleure santé;
- la qualité de l'environnement s'améliore dans certaines régions.

15. Néanmoins, les pays ont exprimé de vives inquiétudes parce que les tendances en ce qui concerne le développement durable sont moins bonnes aujourd'hui qu'en 1992. Voici quelques-uns des indicateurs clés de développement non durable dont ils ont fait mention :

- l'accroissement des niveaux d'émissions de gaz à effet de serre, des polluants toxiques et des déchets solides;

Des progrès ont été accomplis à l'échelle mondiale. Mais dans l'ensemble, les tendances en ce qui concerne le développement durable sont moins bonnes aujourd'hui qu'il y a cinq ans.

Points saillants (suite)

7. Toutefois, la plupart des ministères n'ont pas établi de cibles claires dont ils pourraient se servir eux-mêmes, ainsi que les parlementaires et le public, pour juger du succès de la mise en oeuvre de la stratégie. En outre, de nombreuses stratégies s'en tiennent au statu quo plutôt que de préconiser de nouveaux engagements concrets en vue de mieux protéger notre environnement et promouvoir le développement durable.

8. Les premiers rapports environnementaux des grandes sociétés, préparés il y a moins de dix ans, comportaient des faiblesses semblables. Toutefois, ces mêmes sociétés ont tiré des leçons et elles se sont améliorées. Le défi, pour le gouvernement, consiste à faire de même. Tout comme « l'écologisation » s'est avérée une bonne pratique dans le domaine des affaires, « l'écologisation » du gouvernement sera le reflet d'une saine gestion publique.

Observations du commissaire

Points saillants

1. En juin 1997, le Canada a assisté avec plus de 165 pays à une session extraordinaire de l'Assemblée générale des Nations Unies qui avait été convoquée afin d'évaluer les progrès accomplis en matière de développement durable depuis le Sommet de la Terre tenu à Rio, en 1992. Les États membres ont conclu que les tendances dans ce domaine étaient moins bonnes aujourd'hui qu'il y a cinq ans. À l'instar de ses voisins du monde, le Canada s'était engagé à accomplir des progrès mesurables plus importants au cours des cinq années subséquentes.

2. L'enjeu est de taille pour le Canada. Celui-ci est intimement lié — tant sur le plan économique que sur le plan écologique — au reste du monde. La qualité de notre environnement dépend non seulement du comportement des Canadiens, mais aussi et de plus en plus, des activités qui se déroulent à l'extérieur des frontières nationales.

3. Le Canada a pris de nombreux engagements envers la communauté internationale. En retour, nous tirons parti de ceux que prennent d'autres pays. Un des principes fondamentaux du droit international veut que les pays s'acquittent de bonne foi de leurs obligations internationales et les traduisent par des mesures significatives sur le plan intérieur. Dans un certain nombre de secteurs, le Canada ne tient pas ses promesses. Par exemple :

- Partout dans le monde, les gouvernements sont confrontés à une nouvelle génération de problèmes environnementaux, dont les changements climatiques constituent peut-être le problème le plus grave. Celui-ci englobe des questions qui sont au coeur de la manière dont nous menons et gagnons notre vie. Tout comme beaucoup de pays, le Canada a reconnu qu'il ne remplira pas sa promesse de longue date qui consiste à stabiliser, d'ici l'an 2000, les émissions de gaz à effet de serre aux niveaux de 1990.

- Le Canada était l'un des premiers pays à ratifier la *Convention sur la diversité biologique* de 1992, mais il tarde à l'appliquer. Cinq ans plus tard, un plan global de mise en application — outil essentiel de coordination des efforts au sein des gouvernements fédéral, provinciaux et territoriaux — n'a pas encore été élaboré.

4. Dans ces secteurs et dans d'autres, le gouvernement fédéral ne remplit pas ses engagements, car il n'accorde pas assez d'attention à l'aspect gestion de l'équation du développement durable.

5. Des mesures novatrices sont prises pour tenter de régler ce problème à l'échelle gouvernementale. Les modifications à la *Loi sur le vérificateur général* exigent que les ministères préparent des stratégies afin que le concept du développement durable se traduise en actions concrètes dans leurs politiques, programmes et activités quotidiennes.

6. Lors de notre premier examen de ces stratégies, nous avons constaté que la plupart des ministères avaient fait la plus grande partie de ce qu'on leur avait demandé. Nous savons enfin comment chacun des ministères perçoit le développement durable et quelles mesures il entend prendre pour le promouvoir.

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Avant-propos

Je suis heureux de soumettre mon rapport de 1998 à la Chambre des communes. Cet avant-propos est suivi de « Observations du commissaire – 1998 » et des points saillants qui sont tirés de tous les chapitres de cette année. Ce volume contient en outre 8 chapitres reliés séparément.

1. L'écologisation du gouvernement du Canada : les stratégies de développement durable

Les défis mondiaux

2. Les engagements internationaux du Canada en matière d'environnement : une collaboration mondiale
3. Réagir aux changements climatiques : il est temps de repenser la stratégie d'intervention du Canada
4. La biodiversité au Canada : le temps presse

Gestion axée sur le développement durable

5. Élargir les horizons : une approche stratégique pour le développement durable
6. L'évaluation environnementale : un outil de première importance pour le développement durable
7. Prendre les coûts environnementaux en compte
8. La mesure de la performance des stratégies de développement durable

Avant-propos

AU LECTEUR :

Je vous invite à me faire part de vos commentaires et suggestions sur ce rapport, le plan de travail proposé et toute autre question liée à l'environnement et au développement durable. Veuillez adresser vos commentaires à l'adresse suivante :

Monsieur Brian Emmett

Commissaire à l'environnement et au développement durable

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Ottawa (Ontario)

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ou par courrier électronique à :

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COMMISSIONER OF THE ENVIRONMENT
AND SUSTAINABLE DEVELOPMENT

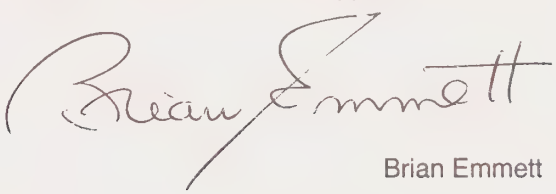
CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA
COMMISSAIRE À L'ENVIRONNEMENT
ET AU DÉVELOPPEMENT DURABLE

À l'honorable Président de la Chambre des communes :

Au nom du vérificateur général du Canada, j'ai l'honneur de transmettre par la présente mon rapport à la Chambre des communes pour l'année 1998, qui doit être déposé devant la Chambre conformément aux dispositions du paragraphe 23(3) de la *Loi sur le vérificateur général.*

Le commissaire à l'environnement et au développement durable,



Brian Emmett

OTTAWA, 26 mai 1998

Le Rapport de 1998 comporte 8 chapitres, ainsi que les « Observations du commissaire » et un Avant–propos. Pour mieux répondre aux besoins de nos clients, il est disponible sur divers supports. Pour obtenir d'autres documents ou les obtenir sur un autre support, voir la Table des matières et le bon de commande à la fin du présent document.

Dans le présent rapport, le genre masculin est utilisé sans aucune discrimination et uniquement dans le but d'alléger le texte.

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Rapport du commissaire à l'environnement et au développement durable à la Chambre des communes

Observations du commissaire – 1998

Avant-propos et Points saillants

1998



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Government Publications

CANADA

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons

Chapter 1
Greening the Government of Canada – Strategies for Sustainable Development



1998

CANADA

Report of the

Commissioner of the Environment and Sustainable Development

to the House of Commons

Chapter 1

Greening the Government of Canada – Strategies for Sustainable Development

1998

This 1998 Report comprises 8 chapters, including "The Commissioner's Observations" and a Foreword. In order to better meet clients' needs, the Report is available in a variety of formats. If you wish to obtain another format or other material, the Table of Contents and the order form are found at the end of this chapter.



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Chapter 1

Greening the Government of Canada — Strategies for Sustainable Development

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants. The numbered paragraphs in bold face represent recommendations.

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Greening the Government of Canada — Strategies for Sustainable Development

Main Points

1.1 In 1995, legislation was enacted to help strengthen the federal government's performance in protecting the environment and promoting sustainable development. Through amendments to the *Auditor General Act*, ministers were required to have sustainable development strategies prepared for their departments.

1.2 The sustainable development strategies were intended to help departments broaden their perspective on what they do and how they do it — to more systematically take environmental, economic and social considerations into account in their policies, programs and operations. The strategies were meant to help turn sustainable development from words into action. The Commissioner of the Environment and Sustainable Development was appointed to help parliamentarians assess them.

1.3 Preparation of a sustainable development strategy is a systematic process that:

- begins with an identification of what a department does and how it does it;
- assesses those activities in terms of their sustainable development impacts;
- seeks the views of clients, partners and other stakeholders on priorities;
- establishes goals, objectives and benchmarks for measuring progress;
- presents an action plan to translate those goals into concrete results; and
- concludes with an explanation of how the department will measure and report on its performance.

1.4 In our first review of the departmental sustainable development strategies, we found that most departments prepared a strategy consistent with the majority of those basic requirements. For the first time, therefore, we have a picture of how each government department currently views sustainable development and of the actions each one intends to take to promote it. Moreover, strategy preparation has increased awareness of sustainable development issues within those departments.

1.5 However, our review of the strategies revealed a number of weaknesses, two of them fundamental.

- Almost all departments failed to establish the clear and measurable targets that are key to the success or failure of the sustainable development strategy process. As a consequence, departments, parliamentarians and the public lack the benchmarks they need to judge whether the strategies are being successfully implemented, or to determine when corrective action may be required.
- Many strategies appear to represent less a commitment to change in order to promote sustainable development than a restatement of the status quo. Those strategies tend to focus more on past accomplishments than future directions. Less than one half identify specific policy, program, legislative, regulatory or operational changes that would be made to implement the strategy.

Main Points (cont'd)

1.6 The lack of benchmarks needs to be dealt with quickly. We believe that departments need to establish a clear set of targets and present them to the House of Commons in the spring of 1999.

1.7 By 15 December 2000, departments are expected to present their second sustainable development strategies. Building on the experience gained from the first round of strategy preparation, we will be looking for a significant improvement in strategy quality in the second round. In particular, we expect departments to focus more on what they will do differently to promote sustainable development.

Introduction

1.8 In 1995, the Government of Canada introduced new tools to strengthen its performance in protecting the environment and promoting sustainable development. Amendments to the *Auditor General Act* required ministers to have sustainable development strategies prepared for their departments. The Commissioner of the Environment and Sustainable Development was appointed by the Auditor General to help parliamentarians assess the strategies.

1.9 By the end of 1997, 28 strategies were tabled in the House of Commons. This was our first review of those strategies. Our objective was to help parliamentarians understand what departments did to meet the legislative requirement, and thus exercise oversight of the sustainable development strategy process.

Focus of the audit

1.10 In conducting the audit, we asked, "Did departments do what they were asked to do?" To answer this question, we looked at the consistency between the legislative and policy direction that departments were provided and the strategies they produced.

- We reviewed 28 strategies: 24 from departments and agencies (hereinafter referred to as departments) required by the legislation to prepare them, and 4 that were prepared voluntarily by other federal organizations (see Exhibit 1.1).

- Of the 28 strategies, 6 were chosen for a more in-depth review. The departments selected represent a cross-section of policy, program and operational mandates and include the following: Environment Canada, the Department of Finance, Foreign Affairs and International Trade Canada, Industry Canada, Natural Resources Canada, and Public Works and Government Services Canada.

1.11 Additional details can be found in the **About the Audit** section at the end of this chapter.

The federal government has new tools to protect the environment and to promote sustainable development.

Observations and Recommendation

What Ministers and Their Departments Were Asked to Do

1.12 The amendments to the *Auditor General Act* that came into force 15 December 1995 directed ministers to do three things:

Departments Required by Legislation to Table a Sustainable Development Strategy[1]

Agriculture and Agri-Food Canada	Indian and Northern Affairs Canada
Atlantic Canada Opportunities Agency	Industry Canada
Canadian Heritage	Department of Justice
Canadian International Development Agency	National Defence
Citizenship and Immigration Canada	Revenue Canada
Environment Canada	Natural Resources Canada
Federal Office of Regional Development (Québec)	Public Works and Government Services Canada
Department of Finance	Solicitor General Canada
Fisheries and Oceans Canada	Transport Canada
Foreign Affairs and International Trade Canada	Treasury Board Secretariat
Health Canada	Veterans Affairs Canada
Human Resources Development Canada	Western Economic Diversification

Departments That Voluntarily Tabled a Sustainable Development Strategy[2]

Canadian Environmental Assessment Agency	Office of the Auditor General of Canada
Correctional Service Canada	Royal Canadian Mounted Police

Exhibit 1.1

Departments That Tabled Sustainable Development Strategies

[1]**Source:** *Auditor General Act*

[2]**Source:** Departmental Sustainable Development Strategies

- have their departments and agencies prepare a sustainable development strategy;
- table the strategy in the House of Commons within two years; and
- update the strategy at least every three years.

1.13 A strategy was defined in the *Auditor General Act* as the department's objectives and plans of action to further sustainable development. Exhibit 1.2 presents the definitions of a sustainable development strategy contained in the legislation and in related policy documents. It also provides examples of how departments themselves defined a sustainable development strategy in their own work.

Exhibit 1.2

Sustainable Development Strategies

What does sustainable development mean?

Sustainable development provides a framework for the integration of environmental policies and development strategies. It recognizes that development is essential to satisfy human needs and improve the quality of human life. But development must be based on the efficient and environmentally responsible use of all of society's scarce resources — our natural, human, and economic resources.

The World Commission on Environment and Development (the Brundtland Commission) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It is this definition of sustainable development that has been integrated into federal legislation and into the amendments to the *Auditor General Act* that establish the Commissioner of the Environment and Sustainable Development. This definition, therefore, provides an important point of reference for departments when preparing their sustainable development strategies. **Source:** Government of Canada, *A Guide to Green Government*, 1995

What is a sustainable development strategy?

"Departments' sustainable development strategies will provide leadership in the shift to sustainable development in setting goals and objectives, action plans, and benchmarks against which to measure progress. They will be developed in consultation with key stakeholders." **Source:** Government of Canada, *Response to the First Report of the Standing Committee on the Environment and Sustainable Development*, October 1994

"sustainable development strategy ...means the department's objectives and plans of action, to further sustainable development." **Source:** *Auditor General Act*

"[sustainable development strategies] will outline each department's concrete goals and action plans for integrating sustainable development into their policies, programs and operations." **Source:** Government of Canada, *A Guide to Green Government*, 1995

How did departments interpret it?

According to some of the departments that have tabled strategies, a sustainable development strategy:

"...outlines how the department will turn the concept of sustainable development into concrete action." **Source:** *Revenue Canada's Sustainable Development Strategy*

"...is a framework document designed to help focus the department's thinking on the relationships and inter-linkages between what the department does and sustainable development." **Source:** *Department of Finance's Sustainable Development Strategy*

"...describes how the Department will translate the concept of sustainable development into operational terms. The Strategy focuses on the Department's policies, programs and activities." **Source:** *Health Canada's Sustainable Development Strategy*

"A strategy helps a department turn sustainable development from words into action." **Source:** *Towards Sustainable Development*
A Strategy for the Department of Indian Affairs and Northern Development

1.14 To help departments prepare their strategies, the government issued *A Guide to Green Government* in 1995. The Guide presented the main elements of a sustainable development strategy (listed in Exhibit 1.3) and encouraged departments to tailor the preparation of their strategies to their specific mandates and ways of doing business. The Guide also provides a useful benchmark for reviewing the strategies.

1.15 Preparation of a sustainable development strategy was to be a systematic process that:

- began with an identification of what a department does and how it does it (the departmental profile);
- assessed departmental activities in terms of their sustainable development impacts (the issue scan);
- sought the views of clients, partners and other stakeholders on priorities (the consultation process);
- established goals and benchmarks for measuring progress (the department's sustainable development goals, objectives and targets);
- presented an action plan to translate those goals into concrete results; and
- concluded with an explanation of how the department would measure and report on its performance.

The departmental profile identifies what the department does and how it does it

1.16 A departmental profile indicates what the department does and how it does it. The profile is an important element in the strategy because it establishes the broad context for the rest of the document, providing readers with an understanding of the department's mandate and key activities. The profile represents the starting point for an assessment of how sustainable development should be integrated into the department's mandate, policies, programs and operations.

The issue scan assesses departmental activities in terms of their impact on sustainable development

1.17 The issue scan involves a self-assessment of the departmental policies, programs and operations in terms of their impact on sustainable development. Departments were asked to

Preparation of a sustainable development strategy was to be a systematic process to integrate economic, environmental and social considerations into how a department sees and does its business.

Exhibit 1.3

Preparing a Sustainable Development Strategy

i.	**Departmental Profile** Identification of what the department does and how it does it.
ii.	**Issue Scan** Assessment of the department's activities in terms of their impact on sustainable development.
iii.	**Consultations** Seeking the perspective of clients, partners and other stakeholders on departmental priorities for sustainable development and how to achieve them.
iv.	**Goals, Objectives and Targets** Identification of the department's goals and objectives for sustainable development, including benchmarks it will use for measuring performance.
v.	**Action Plan** How the department will translate its sustainable development targets into measurable results, including specific policy, program, legislative, regulatory and operational changes.
vi.	**Measurement, Analysis and Reporting of Performance** Mechanisms the department is establishing to monitor and improve performance.

Source: Government of Canada, *A Guide to Green Government*, 1995

A Profile of the Canadian International Development Agency

The Canadian International Development Agency (CIDA) describes its mandate and activities in the following way in its sustainable development strategy:

> CIDA is the lead government organization responsible for Canadian international co-operation.
>
> The Government's Foreign Policy Statement, released in February 1995, sets out the following purpose, or mission, for the Canadian international co-operation program: *The purpose of Canada's Official Development Assistance is to support sustainable development in developing countries, in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.*
>
> In support of this mission, the Agency has developed a poverty reduction policy. It commits CIDA to making poverty reduction a key element in each of its six program priorities, which are: basic human needs; women in development and gender equity; infrastructure services; human rights, democracy and good governance; private sector development; and environment. The policy is being implemented across all of CIDA's programming channels and includes initiatives that address poverty through both direct and indirect means.
>
> CIDA's business is global in scope, encompassing a very wide range of sectors. This involves the Agency in global, regional and country-level initiatives undertaken with a number of partners: recipient-country governments, all levels of government in Canada, non-governmental organizations (NGOs), educational institutions, business, co-operatives, and a variety of international organizations and institutions located in Canada and abroad.
>
> CIDA is also responsible for the delivery of programs to countries in Central and Eastern Europe. The assistance provided to these countries reflects the following mission:
>
> - to support democratic development and economic liberalization in Central and Eastern Europe by building mutually beneficial partnerships.
>
> In developing countries, as in Central and Eastern Europe, CIDA puts policy into practice in several ways, including:
>
> - direct bilateral assistance through projects and programs agreed upon with developing country governments or institutions;
> - funding activities through multilateral organizations, including development banks, multilateral agencies and international NGOs;
> - supporting projects proposed by Canadian partners from the profit, not-for-profit and institutional sectors; and
> - through policy influence and dialogue pursued with developing countries, with other donors, or in international fora, in close collaboration with the Department of Foreign Affairs and International Trade, and with other government departments.

Excerpt from:
Our Commitment to Sustainable Development
The Strategy of the Canadian International Development Agency

identify key sustainable development issues from a departmental standpoint. The issue scan helps the departments understand the implications of their activities for sustainable development.

1.18 The issue scan is a key aspect of the strategy because it links what the department does, as described in the departmental profile, with the issues that the department must address if it is to be successful in moving toward sustainable development. It also facilitates the development of goals, objectives and targets that will move the department along the path toward sustainable development.

Consultations involve obtaining perspectives of clients, partners and other stakeholders

1.19 Consultations involve obtaining the perspectives of clients, partners and other stakeholders on departmental priorities and how to achieve them. Sustainable development is a shared responsibility among different levels of government, Aboriginal people and other stakeholders. Consultations are therefore the primary mechanism for demonstrating the federal government's commitment to open and transparent policy and program development on sustainable development.

Issues Facing Canadian Heritage

Canadian Heritage outlines its issues in its sustainable development strategy as follows:

> This first Sustainable Development Strategy for Canadian Heritage focusses on the environmental aspects of sustainable development... The Department, however, recognizes that much of the ongoing work of the Canadian Heritage Program also supports the achievement of sustainable development in Canada. By strengthening Canada's socio-cultural framework, the programs and services of the Canadian Heritage Program help to bring about the level of participation and cultural awareness in society that is necessary for sustainable development.
>
> In developing its Sustainable Development Strategy, the Department has identified six major areas where it can make its greatest contribution.
>
> 1) Much of Canada's national heritage is still unrepresented in national systems....
> 2) Maintaining the ecological and commemorative integrity of national parks and national historic sites is essential....
> 3) The Department and the activities it funds have environmental impacts....
> 4) We need better information on the socio-cultural, economic and biophysical aspects of sustainable development....
> 5) Canadian Heritage can influence others, and learn from them....
> 6) Fiscal realities affect our choices....

Excerpt from:
Sustaining our Heritage
The Sustainable Development Strategy of the Department of Canadian Heritage

Consultations at Transport Canada

Transport Canada describes its consultation process and the views of its stakeholders as follows:

> The National Advisory Group met several times during the preparation of the strategy and provided advice on both the issues and the regional workshops. Six regional stakeholder workshops were held during November and December of 1996 to solicit early stakeholder input to Transport Canada's Sustainable Transportation Strategy. These workshops helped to refine the final eight strategic challenges that are central to the strategy, and Transport Canada's roles and actions in achieving them.
>
> In total, over 80 participants attended the workshops, as well as Transport Canada representatives from headquarters and the regional offices. The stakeholders indicated that Transport Canada should:
>
> – take a proactive, leadership role in sustainable transportation;
>
> – develop reasonable, measurable short-term and long-term goals;
>
> – ensure that the strategy balances environmental objectives with social and economic objectives;
>
> – work with others to ensure federal consistency in defining and delivering sustainable transportation initiatives;
>
> – make integrated use of all tools to encourage behaviour change and use of preferred technologies; and
>
> – continue and expand the consultative process.
>
> Following the drafting of the strategy, over 50 meetings were held with representatives of provincial/territorial governments, transportation carriers and shippers, and environmental groups. The meeting attendees in general agreed with the Department in the challenges being pursued. Environmental groups want them pursued with vigor.
>
> A number of provinces and territories raised the view that Canada is settled sparsely in many regions and that solutions for sustainable transportation must take this population density into account, as well as the needs of rural dwellers. The provinces and territories also recognized the need to work co-operatively on solutions for major urban areas and densely populated regions.
>
> Carriers and shippers, while recognizing societal concerns about environmental impacts of transportation, articulated strongly the need to take account of the economic impacts of any proposed policy changes and the need to ensure transportation is considered as a vital function in support of the economy and international trade. Many stakeholders, however, expressed a willingness to work with Transport Canada in partnership to address issues in the Department's action plan.

Excerpt from:
Sustainable Development Strategy
Transport Canada

1.20 Consultations are important because, by involving a wide range of interested parties in the decision-making process, they can lead to more informed decisions and greater public acceptance of them. They also help departments determine whether they are doing the right things in the right ways.

Strategies establish goals, objectives and benchmarks for measuring progress

1.21 Goals, objectives and targets are tools for managing a department's sustainable development agenda, and provide benchmarks for measuring progress. Goals establish the overall sense of direction and set the parameters for action; objectives set the aims arising under each goal; and targets are the detailed performance requirements that departments attempt to achieve.

1.22 Goals, objectives and targets are important because they provide the focal point for departmental efforts toward sustainable development. The selection of targets is also an indication of departmental priorities. Although difficult to establish, targets are a critical component in the preparation of a sustainable development strategy.

Action plans translate goals into measurable results

1.23 Action plans indicate what the departments will do to translate their sustainable development goals into measurable results. They define the specific policy, program, legislative, regulatory or operational changes needed to move toward sustainable development. They should also describe how the department will work with others to achieve their goals.

1.24 The action plans, and their implementation, will be the focal point for future review of departmental strategies by the Commissioner of the Environment and Sustainable Development.

Performance information determines whether intended results are achieved or corrective action is required

1.25 Departments, parliamentarians and the public need performance

Goals, Objectives and Targets at National Defence

National Defence has a matrix that identifies goals, objectives and targets by issue. The following is an example:

Issue	– Ecosystems
Goal	– The health of our ecosystems is protected
Objectives	– Military activities are planned such that adverse impacts on ecosystems are mitigated and biodiversity is maintained
	– Non-military activities on National Defence/Canadian Forces lands are conducted with minimal impacts on ecosystems and maintenance of biodiversity
	– Noise impacts are mitigated
Targets	– Training area management plans that protect rare and endangered species, wetlands, and critical habitat are initiated at selected training areas by 2000
	– Natural resource management plans (e.g., forestry, hunting, cattle grazing, oil and gas extraction, recreation, and non-military training) that protect rare and endangered species, wetlands, and critical habitat are initiated at selected training areas by 2001
	– Pesticide use is reduced by 50% from 1993 levels by 2003
	– A planning tool for noise at airfields, helicopter landing areas, small-arms ranges, and artillery ranges is produced by 1999

Excerpt from:
Environmentally Sustainable Defence Activities
A Sustainable Development Strategy for National Defence

Action by the Department of Indian Affairs and Northern Development

This is how the Department of Indian Affairs and Northern Development (DIAND) sets out the actions for one of its objectives:

Objective — To increase the capacity of northern communities, particularly the Aboriginal ones, to benefit from economic and resource development opportunities

Target — Aboriginal community benefits from resource development opportunities

Actions

- Include DIAND's sustainable development principles in funding criteria of the Resource Access Negotiation (RAN) program. (Regions)
- Promote sustainable resource management practices through the Community Economic Development Program. (HQ & Regions)
- Work with the GNWT, other federal departments, industry and Aboriginal organizations to co-ordinate economic development programs which support Aboriginal communities (e.g. Community Mobilization Program, Resource Access Negotiations). (NWT Region)
- Prepare paper to determine the Department's role in economic development in the North. (HQ & Regions)
- Require oil and gas companies operating in the North to identify and provide training opportunities for Aboriginal people. (HQ)
- Require oil and gas companies operating in the North to support the development of regional businesses and to give first consideration to hiring northerners. (HQ)

Excerpt from:
Towards Sustainable Development
A Strategy for the Department of Indian Affairs and Northern Development

information to determine whether the departmental strategy is on track, whether the activities are achieving the intended results or whether corrective action may be required. Continuous improvement is needed to make measurable progress on sustainable development.

1.26 The *Auditor General Act* requires that sustainable development strategies be updated at least every three years and tabled in the House of Commons. The government has also directed departments to report annually on their performance.

What Departments Did

1.27 Did departments do what they were asked to do? To answer this question, we developed a checklist based on the legislative direction provided in the *Auditor General Act* and on the policy direction in *A Guide to Green Government*. Exhibit 1.4 presents this checklist.

1.28 We expected that strategies would include most, if not all, of the components in the checklist. Each component of the checklist is necessary if departments, parliamentarians and the public are to know where departments are going, how they will get there, and how they will know if they are successful.

Most strategies were consistent with basic requirements but fundamental weaknesses exist

1.29 Overall, we found that most departments prepared a strategy consistent with the majority of the basic requirements. For the first time, therefore, we have a picture of how each government department currently views sustainable development and of the actions each one intends to take to promote it.

1.30 We noted, however, that some departments need to catch up with their peers. Our review revealed a number of areas of weakness, two of them fundamental.

- Almost all departments failed to establish clear and measurable targets. Those targets are fundamental to the success or failure of the sustainable

Most departments tabled a strategy consistent with basic requirements. However, several departments need to catch up with their peers and all departments had difficulty setting clear targets.

Measurement, Analysis and Reporting at Natural Resources Canada

Natural Resources Canada (NRCan) presented its performance management system in the following way:

> Sustainable development is a broad concept. As such, it is important to define more precisely what we are trying to achieve, and then put in place the means to measure and report on progress. NRCan's work in promoting sustainable development can be assessed at three different levels.
>
> **Commitments and actions.** At the most basic level, we must monitor and report on the actions and commitments made in our strategy - did we do what we said we would do? Managers within the Department will be responsible for implementing specific components of the sustainable development strategy and will be accountable for progress in their areas of responsibility. In assessing our performance, we will report on each commitment and action in the strategy.
>
> **Achievement of objectives.** More difficult is the need to assess our performance against the strategy's objectives. This goes beyond merely reporting on whether a specific action was completed, to assessing whether those actions are actually helping us reach the objectives identified in this strategy.
>
> For each of the strategy's objectives we will report on a few indicators to help assess our achievements. [A table in the strategy] contains a draft of the performance indicators we have developed to measure progress against our objectives. These indicators will continue to be further refined over the first few months of the strategy, in consultation with stakeholders.
>
> **National progress on sustainable development.** At a much broader level is the need to gauge Canada's overall progress in the sustainable development of its natural resources. This goes beyond the contributions of NRCan. It must reflect the work and efforts of all Canadians who have an interest in the sustainable development of our resources, including other federal departments, provinces, industry, scientists, environmental groups, and Aboriginal and rural communities.
>
> At present, a framework of sustainable development indicators has been developed to measure success in the sustainable management of Canada's forests. These indicators were developed by a multi-stakeholder group, under the leadership of the Canadian Council of Forest Ministers. The framework includes six broad criteria and 86 indicators. Canada's first report on these indicators was published in 1997.
>
> A key commitment in this strategy is NRCan's commitment to work with stakeholders to create sustainable development indicators for both the minerals and metals, and energy sectors.

Excerpt from:
Safeguarding our Assets, Securing our Future
Sustainable Development Strategy for Natural Resources Canada

Departments described their current mandates and key activities. They consulted their stakeholders and established goals and objectives. But they had difficulty setting concrete targets.

development strategy process. Without them, departments, parliamentarians and the public lack the benchmarks to judge whether the strategies will be successfully implemented, or when corrective action may be required.

- Our review also raised questions about what departments would change as a result of their strategies. Less than half identified specific policy, program, legislative, regulatory or operational changes that would result from strategy implementation.

Results by strategy component

1.31 Exhibit 1.5 presents the government-wide picture by strategy component. In reviewing the strategies, we found the most significant areas of strength were:

- describing departmental mandates and activities;
- consulting stakeholders; and
- establishing goals and objectives.

1.32 The most significant areas of weakness were:

- identifying policy, program and operational issues in issue scans;
- indicating the views of stakeholders, and how they influenced the strategy;
- setting clear, measurable and specific targets; and
- defining specific policy, program, legislative and operational changes in the action plan.

1.33 **Departmental profiles.** In most strategies, the departmental profiles

included information on the department's mandates and activities. However, four departments (14 percent) did not describe their legislative or policy context. About a third of departments did not indicate how their mandates have evolved and are expected to change in the coming years.

1.34 Issue scan. Many departments had difficulty presenting an issue scan from a sustainable development standpoint. Of the 28 strategies, a third did not describe sustainable development issues from a policy-making or program perspective in their issue scan. Twelve departments (43 percent) did not describe sustainable development issues relating to their internal operations in their issue scan; and three strategies (10 percent) did not contain an issue scan.

Exhibit 1.4

Did Departments Do What They Were Asked To Do?

A Conformance Checklist

The following checklist was used to determine if sustainable development strategies (SDS) conformed with the requirements of the *Auditor General Act* and *A Guide to Green Government.*

A. Departmental Systems and Procedures

1. Was the SDS tabled in Parliament by 15 December 1997?

B. Departmental Profile

1. Does the SDS contain a departmental profile?
2. Are the department/agency's mandate and key activities described?
3. Is the legislative and policy context in which the department/agency operates described?
4. Is there a description of how the mandate, priorities, objectives and challenges of the department have evolved and how they are expected to change over the term of the SDS?

C. Issue Scan

1. Does the SDS contain an issue scan?
2. Has the SDS identified sustainable development issues from a departmental/agency policy making and programs standpoint in the issue scan?
3. Has the SDS identified issues in managing the department/agency's internal operations in the issue scan?
4. Does the SDS identify opportunities for, and constraints to, the advancement of sustainable development by the department/agency?

D. Consultations

1. Does the SDS contain information on consultations?
2. Has the department/agency obtained the views of clients, partners and other stakeholders?
3. Is there a brief discussion on the nature of the consultations and how these views were considered and incorporated into the final product?

E. Goals, Objectives and Targets

1. Has the SDS identified goals?
2. Are these goals consistent with issues identified in the issue scan?
3. Are objectives set for each goal?
4. Do the objectives set the overall aim arising under each sustainable development goal?
5. Do targets set detailed performance requirements? For example, they should be clear, measurable and have specific deadlines.

F. Action Plan

1. Is the requirement for an action plan addressed?
2. Has the department/agency outlined how it will translate its sustainable development targets into measurable results by including specific policy, program, legislative, regulatory or operational changes?
3. Does the action plan describe the partnerships that will help them achieve their targets, objectives and goals?

G. Measurement, Analysis and Reporting of Performance

1. Does the SDS address how the department/agency will measure, analyze and report performance?

Sources: *Auditor General Act* and Government of Canada, *A Guide to Green Government*, 1995

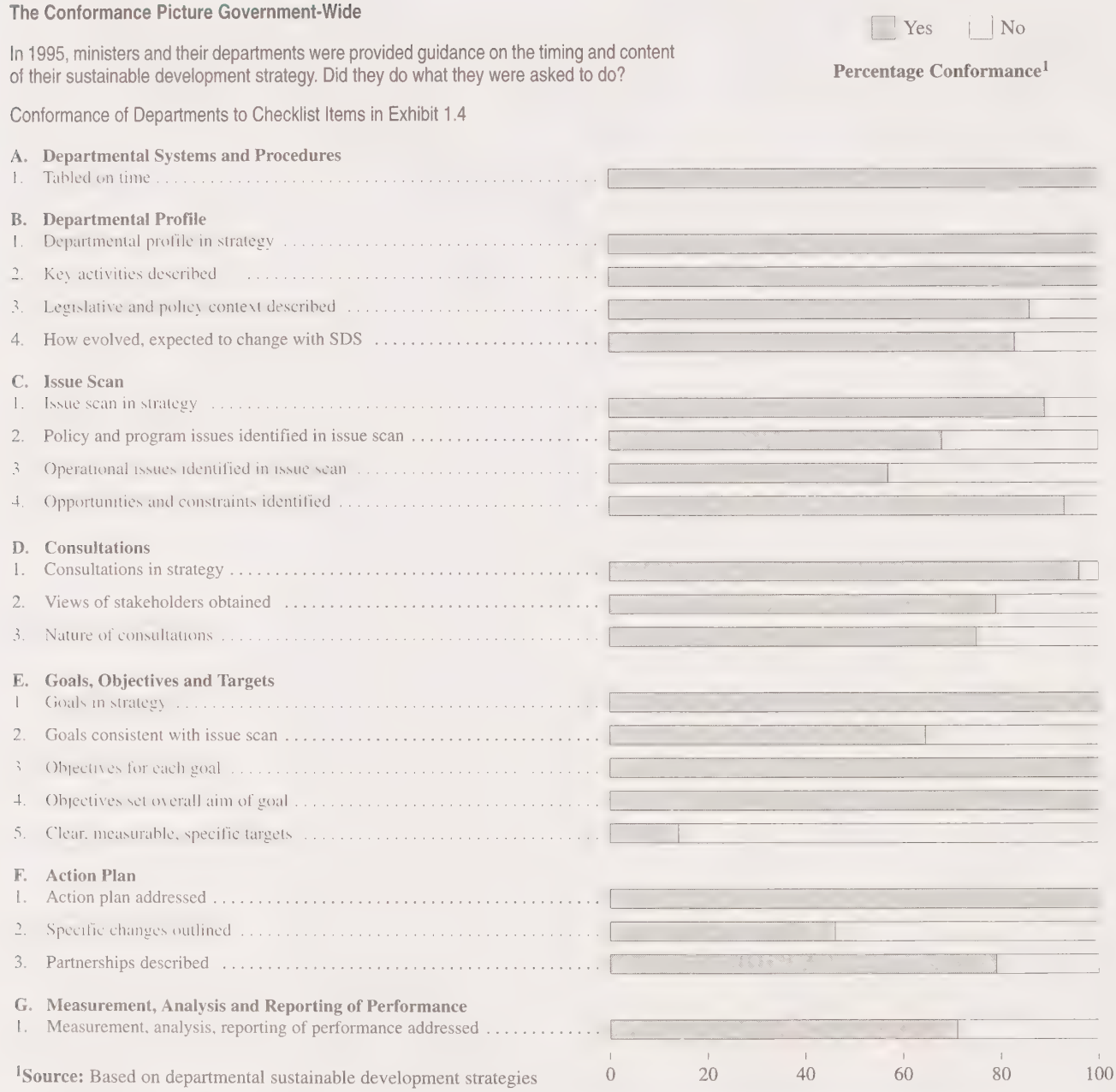
1.35 Consultations. In general, departments were conscientious in their efforts to consult. Twenty-two departments (80 percent) engaged in detailed consultations with clients, partners and other stakeholders. One quarter of the strategies, however, included little information on the nature of the consultations, such as the process followed or the views of stakeholders.

1.36 Goals, objectives and targets. All sustainable development strategies identified goals and objectives. Twenty strategies (71 percent) linked their goals to the issues identified in their issue scan.

Exhibit 1.5

The Conformance Picture Government-Wide

In 1995, ministers and their departments were provided guidance on the timing and content of their sustainable development strategy. Did they do what they were asked to do?



[1]**Source:** Based on departmental sustainable development strategies

1.37 Most departments, however, had difficulty establishing targets consistent with the guidelines in *A Guide to Green Government*. Only 4 of the 28 departments — Correctional Service Canada, National Defence, Natural Resources Canada and Veterans Affairs Canada — included specific and measurable targets for most objectives. While those departments recognize that further work is required, we consider them to have done the best job in this difficult area in the first round of strategy preparation.

1.38 Departments tended to focus on process-related activities. Examples include statements like: "beginning in 1997, involve young Canadians in environmental programs"; or "work with the insurance sector so that it can make informed decisions in light of climate change." While these activities may be valid sustainable development initiatives, they do not easily translate into measurable outcomes.

1.39 **Action plans.** All departments presented an action plan of some form in their sustainable development strategy. Most of these action plans, however, did not describe adequately how the department's sustainable development targets would be translated into measurable results. Of the 28 action plans, less than one half described specific policy, program, legislative and operational changes that must occur to achieve their targets. One in five strategies did not describe the partnerships that will be needed to help the departments achieve their targets.

1.40 **Measurement, analysis, reporting of performance.** While 20 of the departmental strategies (71 percent) addressed how the department will measure, analyze and report performance, as noted in paragraph 1.37, few developed concrete targets as the basis for assessing performance. Some strategies identified the need to work with other departments to achieve some of their sustainable development goals, but the mechanisms for reporting shared performance are not in place.

Results by department

1.41 Exhibit 1.6 summarizes the results by department.

Many departments did not indicate how the strategy would change what they do or how they do it.

- One department — National Defence — received checkmarks in all 21 areas that we examined. It did what it was asked to do.

- Eleven other departments received 19 or 20 checkmarks. The main weakness for them was in the target-setting area.

- At the other end of the scale, six departmental strategies had more deficiencies than their peers did. Their specific shortfalls occurred primarily in the areas of issue identification, consultation, target-setting and action-planning. As a result, it is hard to tell precisely where those departments are going, how they will get there and how they will know if they are successful.

A More In-Depth Look at Six Strategies

1.42 Whether or not a departmental strategy was prepared in a manner consistent with the legislative and policy direction is only one indicator of the quality of the strategy. The second part of our review involved a more in-depth analysis of the strategies of the following six departments: Environment Canada, the Department of Finance, Foreign Affairs and International Trade Canada, Industry Canada, Natural Resources Canada and Public Works and Government Services Canada.

We reviewed six departmental strategies in more detail.

1.43 These six departments were chosen for two reasons. First, they represent a cross section of the types of policy, program and operational activities carried out by the federal government. And second, in our opinion, these departments are critical to the success or failure of the sustainable development

Exhibit 1.6

The Conformance Picture by Department

In 1995, ministers and their departments were provided guidance on the timing and content of their sustainable development strategy. Did they do what they were asked to do?

Conformance by Department to Checklist Items in Exhibit 1.4



Source: Based on departmental sustainable development strategies

*Departments selected for a more in-depth review and reported on in paragraphs 1.42 to 1.61

effort government-wide. Two of the departments — Industry Canada and Natural Resources Canada — have sustainable development in their legislative mandates.

1.44 The Appendix summarizes the six strategies and Exhibit 1.7 presents the criteria used for this more in-depth review. Like the checklist results presented earlier, the criteria were based upon the policy direction provided in *A Guide to Green Government*. However, we probed more deeply into strategy preparation and how strategy implementation will be managed. Interviews were conducted with officials involved in strategy development, and relevant files were reviewed.

In-depth look confirmed fundamental weaknesses

1.45 The results of this more detailed review confirmed the findings presented in the previous section. For the most part, the strategies did a good job of setting the context for the departments' planned sustainable development activities.

- The departmental mandates and key activities were explained well.

- Most departments were able to identify some sustainable development issues that were critical to them, and used a consultation process as part of this effort.

- Departments established goals and objectives for themselves, and had an action plan of some form.

1.46 However, departments were not clear about how their respective strategies would change what they do and how they do it. For some departments, the strategies represented less of a commitment to change in order to move toward sustainable development than a restatement of the status quo.

- Strategies emphasized the positive impact of existing activities on sustainable development.

- Of the six departments, Natural Resources Canada came closest to meeting the requirement to identify the specific policy, program, legislative, regulatory or operational changes needed to implement its strategy.

- Actions were often vaguely worded, using words like "continuing" and "maintaining".

1.47 None of the six departments established a complete set of clear and measurable targets that would allow them and Parliament to judge whether their strategies were moving the departments toward sustainable development. Of the six departments, Natural Resources Canada came the closest to meeting this requirement. Its strategy contained some specific targets, and it is developing a system for assessing its performance at three levels: commitments, objectives and national progress (see Measurement, Analysis and Reporting at Natural Resources Canada, see page 1–14).

Strategy themes illustrate differences in mandates and approaches

1.48 Exhibit 1.8 displays the main themes presented in each of the six sustainable development strategies. The themes illustrate both the different mandates that departments have (their starting points) and the approaches they have taken (their future directions). All six departments recognize the need to look internally at how they make decisions and externally at how they influence the decisions of others. Public Works and Government Services Canada's strategy focusses on mitigating the direct environmental consequences of government operations; the Department of Finance and Foreign Affairs and International Trade Canada take the

"Real progress on our sustainable development strategy only began when senior management seized the issue."

A departmental official involved in preparing a sustainable development strategy.

Exhibit 1.7

Detailed Criteria Established to Review Sustainable Development Strategies

In 1995, ministers and their departments were provided guidance on the timing and content of their sustainable development strategy. Did they do what they were asked to do?

General Criteria

- The sustainable development strategy (SDS) should be relatively brief and focussed while providing sufficient detail to provide guidance for programs and operations within the department or agency.
- The SDS should be comprehensive, dealing both with departmental/agency policies and programs that influence the decisions of others, and with how the department/agency manages its internal operations.
- The SDS should be results-oriented, identifying the main sustainable development results the department/agency expects to achieve, and how it will measure performance toward them. It should be presented as a change document.
- The SDS should provide a frank and honest discussion of the sustainable development issues facing the department or agency.
- The SDS should be developed in consultation with the department/agency's clients, partners and stakeholders.

Criteria for each component of sustainable development strategies

Departmental Systems and Procedures

- There should be commitment to sustainable development at all levels in the department, in particular at senior management levels.
- The necessary systems and practices for the implementation of the sustainable development strategy should be evident.

Departmental Profile

- The departmental profile should provide an understanding of what the department is responsible for, what it does and how it does it.
- The departmental profile should be relatively brief and focussed while providing sufficient detail to put the plan in context.

Issue Scan and Analysis

- The issue scan should provide a reasonable and comprehensive assessment of the department's activities in terms of their impact on sustainable development.
- The issue scan should identify the key sustainable development issues, both short- and long-term, that relate to the department.

Consultations

- The perspectives of clients, partners, employees and other stakeholders should be obtained and incorporated into the SDS as part of the consultation process.

Goals, Objectives and Targets

- The goals, objectives and targets should establish an overall sense of direction and set the parameters for action in the department.
- The department should use these goals, objectives and targets to manage its sustainable development agenda and as benchmarks for measuring progress.

Action Plan

- The action plan should explain how the department will translate its sustainable development targets into measurable results, including specific policy, program, legislative, regulatory or operational changes.

Measurement, Analysis and Reporting of Performance

- The SDS should explain how the department plans to monitor its performance against its action plan and how it will incorporate continuous improvement in updates of its strategy.

Source: based on Government of Canada, *A Guide to Green Government*, 1995

broadest perspectives on sustainable development.

Management of strategies is beginning to become part of the way departments do business

1.49 In order to be successful, the development and implementation of the strategies must become part of the way departments usually do business. We found that this process has begun.

- In most of the six cases, the preparation of the sustainable development strategies involved the efforts of a small group of public servants operating on behalf of the entire department. All six departments placed responsibility for the preparation of the sustainable development strategies at an appropriate management level within the department.

- Five of the six departments linked their sustainable development plans to

Exhibit 1.8

Departmental Sustainable Development Strategies: Strategy Themes

Environment Canada	• To strengthen Environment Canada's ability to meet sustainable development goals. • To be a more effective advocate of sustainable development. • To give Canadians the tools they need to make sound decisions in a changing environment. • To set a good example in the greening of government operations.
Department of Finance	• Integrating the economy and the environment. • Building the future. • Participating in the global economy. • Greening operations.
Foreign Affairs and International Trade Canada	• Economic growth and prosperity. • Building peace and security. • Canadian values and culture. • Greening operations.
Industry Canada	• Foster a marketplace climate in Canada that promotes sustainable development. • Enhance the ability of Canadian firms to develop and use innovative technologies and tools that contribute to sustainable development. • Encourage trade and investment flows that contribute to sustainable development in Canada and abroad. • Continue to improve the capacity of Industry Canada to manage and deliver departmental policies, programs and operations that contribute to sustainable development.
Natural Resources Canada	• Making better decisions. • Enhancing long-term social and economic benefits. • Maintaining a healthy and safe environment. • Putting our house in order.
Public Works and Government Services Canada	• To apply sound environmental principles to the common service business lines and internal operations of Public Works and Government Services Canada. • To support sustainable development through continuous improvement in: – procurement – fleet management – waste management – water conservation – energy efficiency – land use management

Source: departmental sustainable development strategies

"Many departments claim ownership of sustainable development. In reality, we all have a piece."

A departmental official involved in preparing a sustainable development strategy.

their business plans, while one department organized its strategy in terms of its environmental stewardship components.

- Environmental management systems (EMS) are expected to enhance the integration of the strategies into departmental programs and activities. Of the six departments, two — Environment Canada and Natural Resources Canada — have an environmental management system currently in place. Public Works and Government Services Canada has a system in place for its branch that has the most immediate effect on the environment and plans to implement one in other branches. Three other departments had a timetable for EMS implementation.

- All six departmental strategies identified the need for sustainable development training activities, and four departments expressed a commitment to establish some type of training/awareness plan tied to policy and decision-making processes.

- Five of the six departments had prepared communications plans to deal with both internal and external clientele prior to, and following, the tabling of their strategies. In its strategy, the Department of Finance committed itself to preparing a comprehensive communications plan for the greening of its operations.

- Departments did not identify the resources required to implement their strategies.

Mandates and activities were well explained

1.50 Departments did a good job of explaining their mandates and key activities, but were less clear on the legislative and policy context in which they operate. Only Environment Canada provided a complete list of the legislation it is responsible for administering.

1.51 Departments provided little analysis of the policy context within which their program responsibilities are carried out. Only Environment Canada and Industry Canada identified specific challenges they need to address in pursuing sustainable development. According to their strategies, those challenges include: the development of approaches that better integrate environmental, economic and social goals; developing knowledge in a timely manner; and consensus-building.

There was a wide variation in departmental issue scans

1.52 The preparation and dissemination of the issue scans created awareness of sustainable development issues in departments, which is an important benefit of the process. A more detailed examination of the issues, and then assigning priorities to those issues would allow for more effective implementation of the government's sustainable development agenda.

- There was a wide variation among the six departments in the level of detail and comprehensiveness of their issue scans, and in how they were prepared.

- Environment Canada used an internal survey to identify the sustainable development issues for the Department, focussing on those issues affecting its ability to make progress toward sustainable development. The Department did not establish a direct link between the conclusions of the issue scan and strategy objectives; nor did it identify the impacts of its policies, programs or operations.

- The Department of Finance solicited information from across the Department to identify issues and the impact of its activities. The Department focussed on enhancing its capacity to address sustainable development issues and setting priorities for policy analysis over the next three years.

- Foreign Affairs and International Trade Canada also used an internal process to identify issues relating to its

mandate that have a sustainable development impact. The result was a set of general directions for actions, rather than an assessment of impacts or concerns.

- Industry Canada undertook an extensive analysis of issues through a two-stage process that involved consultation and a baseline study. The baseline study helped the Department to understand the sustainable development implications of its activities and how to position itself with respect to the issues. Only a brief summary of this work was included in the strategy document.

- Natural Resources Canada built on analysis and consultations conducted prior to the strategy exercise to identify the issues related to its activities. The Department also drew on extensive work associated with the National Forest Strategy, the Whitehorse Mining Initiative and the development of the *Minerals and Metals Policy of the Government of Canada*. This work was combined with additional consultation as part of strategy development, resulting in a balanced summary of the issues affecting the Department.

- Public Works and Government Services Canada drew on *A Guide to Green Government* to identify its issues rather than conducting its own issue scan.

- Departments did not set priorities among issues. None appears to have used the issue scan as a form of gap analysis — comparing present performance with a desired future state.

- Most issue scans focussed on economic and environmental issues. The scans explored the impact on sustainable development of items such as policies, programs, taxes, regulations, provision of information and internal operations such as procurement and management of buildings, land and fleets. However, most scans did not include an assessment of the social impacts. Three of the departments stated their intention to conduct future analyses of these impacts.

- Most strategies focussed on the positive impact of departmental activities on sustainable development, rather than on presenting a more neutral analysis. In the few instances where negative impacts were reported, they were usually balanced with an observation on an offsetting economic or environmental benefit.

"The department and the client need to struggle with the strategy because that's what makes it more than just another piece of paper."

A departmental official involved in preparing a sustainable development strategy.

Consultations resulted in better sustainable development strategies

1.53 Most departments found that consultations resulted in a better sustainable development strategy. However, some of the departments that attempted to consult widely were disappointed by the limited response they received.

- Four of the six departments made a concerted effort to consult both externally and internally during the process of

The Need for Baseline Studies of Taxes, Grants and Subsidies

In November 1995, the House Standing Committee on Environment and Sustainable Development invited representatives from business, government, the academic community and environmental interests to discuss the promotion of sustainable development. The Committee's report, entitled *Keeping a Promise: Towards a Sustainable Budget*, made recommendations on how to proceed with a baseline study of federal taxes, grants and subsidies in order to identify possible barriers and disincentives to sound environmental practices. For example, taxes and subsidies may have favoured some sources of energy or some modes of transportation over others.

The government made a commitment to do the studies in its July 1996 response to the Eighth Report of the Standing Committee on Environment and Sustainable Development. It said that departments " . . . will undertake baseline study work as an element of their sustainable development strategies." It also said, "Actions resulting from work in the baseline study will also be reported as part of departmental sustainable development strategies, and annually in the budget where tax measures are concerned." Natural Resources Canada and the Department of Finance reported on some work in this area; Industry Canada cited a case study; and the other departments did not report results.

"There was too much emphasis on process results and not enough on environmental improvement results."

A departmental official involved in preparing a sustainable development strategy.

preparing their sustainable development strategies. Many consultation techniques were used, including focus groups, personal interviews, Internet web sites, internal newsletters and mail solicitations to selected groups. While some departments conducted consultations in various locations across Canada, most consultations were conducted in the Ottawa area.

- Consultations of the Department of Finance occurred late in the strategy development process, making it difficult to incorporate the results of the consultations into the final strategy document. Strategy development at Public Works and Government Services Canada did not include a consultation process.

- With some notable exceptions — such as Industry Canada - Natural Resources Canada consultations — departments did not attempt to co-ordinate their consultation process with other departments with shared clientele or program responsibilities.

- Only Industry Canada and Natural Resources Canada documented how specific comments were considered in the preparation of the strategy.

"Co-ordination among departments is not a luxury. It is a necessity."

A departmental official involved in preparing a sustainable development strategy.

Strategies established direction but not benchmarks

1.54 Each of the six strategies established a sense of the department's general approach to sustainable development. However, aside from limited examples found in connection with "greening operations", there were few benchmarks developed that provided clear and detailed performance requirements for internal management or that defined performance in terms that could be objectively audited or assessed by third parties.

- Where targets were set, they tended to focus on the identification of activities or processes to be carried out, such as studies, conferences, analyses or negotiations, rather than the expected results to be achieved.

- Most initiatives and actions included in the strategies were defined vaguely or qualified by phrases such as "where feasible", "where applicable", or "continue to work toward".

1.55 To remedy shortfalls in the performance management aspects of their strategies, departments should establish a clear set of targets and present them to the House of Commons in their spring 1999 reports on plans and priorities.

1.56 Of the six departments, Natural Resources Canada came the closest to meeting the requirement for clear and measurable targets.

Action plans were not specific

1.57 All six of the sustainable development strategies presented an action plan of some form. However, none of the strategies identified specific policy, program, legislative, regulatory or operational changes that would translate departmental objectives into measurable results. Natural Resources Canada came the closest to meeting this requirement. Its strategy sets out the actions that will be taken over the next three years to meet strategy objectives.

- Actions were often vaguely worded, using terms like "continuing", "improving" and "enhancing" existing department activities. More emphasis was placed on things already done than future actions. No department indicated how their initiatives would be funded.

- While most of the strategies referred to partners, such as other government departments, non-governmental organizations, associations, consumer groups, or international organizations, that were needed to help achieve their objectives, none of the strategies indicated how those partnerships will be managed. Nor did the strategies indicate the

mechanisms, roles, responsibilities and accountabilities of these organizations whose co-operative efforts are essential in achieving the departmental sustainable development strategy objectives.

Departments were committed to measurement, analysis and reporting of performance

1.58 All departments committed themselves to measurement, analysis and reporting of performance. Two of the six strategies explained how the departments will measure their accomplishments against the targets in their action plan. Three of the strategies indicated how the departments plan to monitor performance and incorporate change.

1.59 None of the strategies reviewed provided detail on issues such as responsibilities, practices or procedures for measuring performance, or the processes to be followed for reviewing the information and ensuring that it is fed back into the department's planning cycle.

1.60 Departments have taken different approaches to how they plan to report their performance. Three departments state that they will report on their short-term indicators in their annual performance reports. Natural Resources Canada goes further, stating that the Department will also prepare an annual report detailing the implementation of its strategy.

Results by department

1.61 Based upon our review of the strategies and discussions with departmental officials, in our view:

- Natural Resources Canada took the challenge of preparing a strategy seriously and is committed to its implementation and to maintaining sustainable development at the core of the Department's business. Strong senior management commitment was evident. The strategy preparation process has helped the different sectors of the Department get to know each other better; this dialogue is continuing through implementation and the further development of its performance management system. Other departments can learn from Natural Resources Canada's strategy, particularly in areas such as preparation of a performance management system.

- Environment Canada also responded well to the challenge of developing its first strategy. From a sustainable development perspective, Environment Canada's task was in many ways the mirror image of that facing other departments. The environmental aspects of sustainable development are at the core of its mandate; the Department's challenge is to strengthen its capacity to integrate economic and social considerations into how it does its business. The strategy emphasizes the need to work effectively with partners, to conduct joint studies, and to enhance understanding of the integration of economic and social considerations with environmental ones. However, like other departments, the monitoring of performance against stated actions will be problematic.

- Industry Canada, the Department of Finance and Foreign Affairs and International Trade Canada engaged employees from across their respective departments in strategy preparation. All three departments indicated that the major benefit of having gone through the process was raising awareness within their departments. All three documented past or current actions that support sustainable development. It is not clear though how the strategies will make a difference in their future actions.

- Public Works and Government Services Canada has stated that it chose to develop a strategic document on the understanding that parliamentarians were the primary audience. In its view, this led

"What gets measured gets managed."

A departmental official involved in preparing a sustainable development strategy.

Clear and measurable targets are fundamental to the success or failure of the sustainable development strategy process. These have not yet been established.

to a high-level, concise and readable document even though it did not meet all the criteria in *A Guide to Green Government*. In our opinion, the Department did not assess its activities in terms of their impact on sustainable development and did not consult with its clients. As a consequence, it is difficult to judge whether the Department is doing the right things, or whether it will be successful in doing them.

Conclusion

1.62 While the federal government has been involved in the "greening of government" process for many years, 1995 marked the first time that departments were required to prepare sustainable development strategies. They were given two years to prepare their first strategies.

1.63 Overall, we found that most departments prepared a strategy consistent with the most basic requirements. However, there are a number of areas of weakness evident, some of them fundamental. Moreover, several departments need to catch up with their peers.

1.64 Almost all departments failed to establish clear and measurable targets. This strategy element is critical to the overall success or failure of the sustainable development strategy process. Departments, parliamentarians and the public lack the benchmarks to judge whether the strategies are being successfully implemented, or when corrective action may be required.

1.65 In the fall of the year 2000, the strategies are to be updated. Building on the experience and learning gained from this first round of strategy preparation, we will be looking for a significant improvement in strategy quality in the second round. In particular, we expect departments to focus more on what they will do differently to promote sustainable development.

About the Audit

Objective

The two objectives of our audit were:

- to provide an initial assessment of the sustainable development strategies tabled in the House of Commons in 1997, by comparing those strategies with the legislative and policy direction provided to ministers and their departments; and
- to help strengthen the capacity of departments to manage sustainable development issues by identifying good management practices.

Approach and Methodology

The review of the sustainable development strategies is a new undertaking of the Commissioner of the Environment and Sustainable Development. As a first step in fulfilling the Commissioner's mandate, we assessed the strategies for conformance with legislative and policy direction. The implementation of the strategies will be assessed at a future date.

The conformance audit determines the extent to which the departments' sustainable development strategies are consistent with the framework set out in *A Guide to Green Government* and the requirements of the *Auditor General Act*. The Guide suggests an approach for departments to use in preparing their strategies. The main elements of a strategy are set out in Exhibit 1.3.

We reviewed the 24 sustainable development strategies of the government departments and agencies that are required by legislation to table and the four strategies that were prepared voluntarily by departments. Exhibit 1.1 lists the 28 departments and agencies that tabled sustainable development strategies in the House of Commons.

The checklist we used to audit the strategies is based on the main elements of *A Guide to Green Government*. The checklist is set out in Exhibit 1.4. The conformance audit was based solely on an examination of the sustainable development strategies without supplementary analysis of the background documentation contained in departmental files.

A more detailed review was conducted on a sample consisting of the sustainable development strategies of the following six departments: Environment Canada, the Department of Finance, Foreign Affairs and International Trade Canada, Industry Canada, Natural Resources Canada and Public Works and Government Services Canada. These departments were selected because they represent significant policy, program and operational departments. As well, two of these departments have sustainable development in their legislative mandate.

The more detailed review focussed on the information contained in the sustainable development strategies, supplementary documentation produced by the departments and interviews with key personnel responsible for preparing the strategies. The criteria used to review the strategies are presented in Exhibit 1.7.

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Appendix: Summary of Departmental Strategies

Environment Canada

Systems and procedures. The Assistant Deputy Minister, Corporate Services, was assigned overall responsibility for developing the sustainable development strategy (SDS). A senior level steering committee was established to oversee the development of the strategy and a department-wide working group was established to develop the detailed components of the strategy.

Departmental profile. The departmental profile describes Environment Canada's mandate, legislation it is responsible for administering, and the services the Department offers to Canadians. The profile also describes how the Department is structured, the partnership nature of relations with the Department's many stakeholders, and how these relationships are evolving.

Issue scan. The key issues affecting the Department's ability to make further progress toward sustainable development are identified in an Issue Scan Summary. The central premise of this scan is that the increasing scale and diversity of sources of environmental pressure, and the increasing magnitude and complexity of environmental risks require government, Environment Canada and Canadians themselves to take a proactive role in defending the public interest.

Consultations. Consultations were carried out with a broad range of stakeholders. As a basis for these consultations, the Department prepared a discussion paper in the fall of 1996 and sent it to 123 individuals and organizations. A second round of consultations, based on a draft strategy, was sent to 178 individuals and organizations in February 1997. The Department also established an external advisory committee to review the strategy.

Goals, objectives and targets. Environment Canada's strategy identifies four strategic goals to enhance its contribution to sustainable development. These are:

- To strengthen its ability to meet sustainable development goals;
- To be a more effective advocate of sustainable development;
- To give Canadians the tools they need to make sound decisions in a changing environment; and
- To set a good example in the greening of government operations.

For each goal, the strategy identifies a number of initiatives (or objectives) and, in turn, each initiative identifies associated planned results (or targets), key partners, and performance measures.

Action plan. The strategy identifies planned actions. The specific plans and priorities for pursuing the key strategic goals are described as being fully integrated in the Department's Report on Plans and Priorities and in its annual Business Plan.

Measurement, analysis and reporting of performance. The strategy does not separately describe the measurement, analysis and reporting on SDS results. It relies, rather, on existing performance measurement and reporting processes. The strategy does state that the Department will measure its performance in delivering on its SDS commitments within three years.

Department of Finance

Systems and procedures. The Assistant Deputy Minister of the Economic Development and Corporate Finance Branch took the lead in the co-ordination and preparation of the sustainable development strategy, with senior management and branch input.

Departmental profile. The departmental profile is contained in various sections of the strategy. The Department describes its primary mandate as managing the economy and the government's financial resources. The preamble states that in the last four budgets Finance has tried to better integrate the economy and the environment into its policies. The strategy outlines how Finance intends to further those efforts over the next three years. Other sections discuss the Department's policy role and improved processes and co-ordination.

Issue scan. The strategy does not contain an explicit issue scan section although four key issues are identified — integrating the economy and the environment, building the future, participating in the global economy and greening operations. The Department does not indicate how it identified these issues and how it might have prioritized these issues relative to others not mentioned in the strategy.

Consultations. Branches at Finance were involved in the internal consultation process by providing input into the strategy throughout its development. Four weeks prior to tabling of the strategy, a one-day external consultation session was held with the assistance of the National Round Table on Environment and the Economy (NRTEE). Not including Finance officials, 23 participants attended the session. The consultation "provided a number of valuable comments which were taken into consideration in the redrafting of the final document." Written comments were also received from stakeholders and other government departments.

Goals, objectives and targets. The strategy does not explicitly identify its goals, objectives and targets. They are dispersed throughout the document.

Action plan. The strategy does not have a separate section detailing the Department's action plan. Actions are noted throughout the document, without time frames and measurable results.

Measurement and reporting. The strategy does not have a separate section for measurement and reporting. The Foreword of the strategy states, "departments are also required to report annually on progress in implementing their strategies" as well as update them at least every three years. "... the Department has mandated its Departmental Co-ordinating Committee as the vehicle for addressing sustainable development issues including the implementation and reporting on this strategy." Further, "results will emerge as part of the Department's ongoing efforts to implement the government's agenda in the context of priority setting and future budgets."

Foreign Affairs and International Trade Canada

Systems and procedures. The environmental stewardship group in the department (JEN) was designated as the co-ordinating group to prepare the sustainable development strategy. The group required and received input from each departmental branch with respect to *A Guide to Green Government*. The group prepared a draft strategy based on that input and circulated it for comment to branches and other departments. Further drafts were sent to provincial governments and outside organizations for comment. The Executive Committee authorized the formation of a task force headed by the Assistant Deputy Minister, Corporate Services to "provide advice and guidance on departmental priorities and on consultations with the community which took place throughout 1997." JEN has been charged with following up the implementation of the strategy.

Departmental profile. Appendix B to the strategy describes: Legal Mandate, Mission Statement, Policy Priorities, and Organization and Business Lines.

Issue scan. The strategy does not include a separate issue scan section. There are four objectives listed, three of which relate directly to the three pillars of foreign policy — economic growth and prosperity, building peace and security, and Canadian values and culture — and the other to greening operations. Under each objective, there is one composite goal, a listing of "Canadian interests" and a series of action plan-issues for each goal. Each action plan-issues series identifies actions and "milestone indicators". Objectives, goals and actions are not in any order of priority.

Consultations. Appendix C to the strategy describes the consultation process. "The consultation process on Agenda 2000 began within the Department in 1995 and was extended in 1996 to include other departments. In 1997, the process was further broadened to include the business sector, Aboriginal groups, provincial governments, academia, voluntary and community-based organizations and the general public." The Department also put consultation drafts of its strategy on the Internet.

Goals, objectives and targets. Goals, objectives, action plan-issues, actions and "milestone indicators" were identified. Some "milestone indicators" are time-bounded, but few are measurable in terms of results. They are generally steps in some (often-complex) process, the expected results of which are not defined.

Action plan. See "Issue scan" and "Goals, objectives and targets" sections above.

Measurement and reporting. In order to measure performance and report on the strategy, the Department will:

- factor sustainable development considerations into the Performance Review and Accountability Structure and integrate them into the 1998–99 Business Plan; and
- develop mechanisms to ensure ongoing communication and feedback on progress realized toward the achievement of the Department's sustainable development goals and objectives by the close of 1998.

Industry Canada

Systems and procedures. Industry Canada co-ordinated the development of its sustainable development strategy with a steering committee of managers drawn from different responsibility centres of the Department. The steering committee engaged personnel from across the Department to form a network that provided input to the strategy. Further, a sustainable development project team was also formed to be responsible for facilitating feedback from external stakeholders, supporting review of the strategy by senior departmental management and authoring the strategy document.

Departmental profile. Industry Canada's strategy presents a discussion of how the Department is committed to "promote sustainable approaches to the development of the country's economy." It accomplishes this in two ways. Annex 1 of the strategy provides an overview of the mission, role, strategic objectives and lines of business of the Department. In addressing each of the Department's strategic objectives, a discussion of Industry Canada's role is presented in section three of the strategy. The strategy notes, "Industry Canada's mission is to foster a growing, competitive, knowledge-based economy that provides more and better-paying jobs for Canadians; supports stronger, sustainable business growth; and gives consumers, businesses and investors confidence that the marketplace is fair and efficient." The strategy also notes that the Department will promote sustainable development in pursuing its mission.

Issue scan. In Annex 2 to the strategy, the Department outlines its main activities and results from its issue scan. The issue scan begins with a "baseline study that included a review of all existing departmental policies, programs and operations to identify the nature, extent and rationale for the initiatives most closely connected with the concept of sustainable development." The study identified current initiatives, sustainable development themes and positioning and management challenges.

Consultations. Industry Canada solicited input from internal and external stakeholders in developing its strategy. Annex 3 presents a description of the effort undertaken by the Department to identify stakeholders and their views. The Department consulted "primarily industry, consumer and environmental groups." It also used a small group of external stakeholders to provide input to a refined draft for final consultations.

Goals, objectives and targets. The Department presents a table identifying strategic objectives, priorities and expected near-term results. The objectives are aligned with existing departmental objectives contained in its business plan. "For each strategic objective, the Department has established priorities and action plans to incrementally integrate sustainable development into key areas of departmental activity within committed resource levels."

Action plan. The strategy identifies action items for each of its strategic objectives. Of the 27 action items presented, five identify specific deliverable products "such as a study or publication". Most action items focus on "continuing", "improving" and "enhancing" existing departmental activities. "A challenge will be to track and measure the results of these activities."

Measurement and reporting. "Measuring progress involves identifying and reporting the difference that Industry Canada will make as a result of its first sustainable development strategy." "Industry Canada is currently developing a measurement and reporting system that meets both project- and corporate-level needs." Industry Canada is also developing "an evaluation framework for periodically assessing the overall effectiveness of the strategy's implementation."

Natural Resources Canada

Systems and procedures. Natural Resources Canada (NRCan) moved early to put the infrastructure in place to deliver its sustainable development strategy:

- the Assistant Deputy Minister (ADM) for the Canadian Forest Service was designated as the departmental "champion" for the strategy;
- a working group of senior representatives from all sectors ensured that the strategy was supported department-wide; and
- a central branch managed strategy development on a day-to-day basis.

The Department has many of the key systems and procedures in place. For example, an environmental management system has been implemented, has undergone an internal review and is being strengthened.

Departmental profile. The strategy provides a summary of the Department's activities by business line, and refers to some of the relevant legislation and international agreements. It also describes the Department's role in advancing sustainable development.

Issue scan. NRCan built on several national efforts, such as the Whitehorse Mining Initiative, and an internal review of the environmental effects of its operations. This earlier analysis and consultation was combined with additional consultation for the strategy. Some impacts of the Department's activities were identified (e.g. effects on Aboriginal communities) and others implied (e.g. the importance of natural resource industries in Canada). NRCan did not report a systematic analysis of impacts from either internal operations or external activities. Issues were not ranked by priority.

Consultations. The Department consulted by: face-to-face facilitated meetings; publishing a discussion paper with questionnaire on the Internet; and distributing 1200 printed copies of the discussion paper. A wide range of people and interests were invited to participate. The Department was able to reduce "consultation fatigue" and demands on interest groups by co-ordinating consultation with other departments. External consultation affected the goals, objectives, issues and the choice of actions in the strategy.

Goals, objectives and targets. The strategy lists four goals — making better decisions, enhancing long-term social and economic benefits, maintaining a healthy and safe environment, and putting our house in order — and 13 objectives for the Department's activities relating to sustainable development. It presents a detailed action plan for each objective. The Department plans to align the strategy with the Business Plan, ensuring that they both have the same goals and objectives and use the same performance measures for reporting.

Action plan. The strategy lists actions that will be taken over the next three years to meet the objectives. The lists are not comprehensive, but highlight some of the important actions. The actions focus on activities rather than results. The strategy does not identify any priorities among goals, objectives or actions.

Measurement and reporting. The strategy includes draft performance measures, linked to the objectives. The Department made several commitments to performance management in its strategy:

- continuing senior management support at the ADM level;
- establishing measures to ensure accountability of senior departmental managers;
- reporting periodically to the Departmental Management Committee;
- refining common performance measures that will be used for the strategy, the Business Plan and the Science and Technology Strategy; and
- having the Department's progress reviewed by an independent advisory panel.

Public Works and Government Services Canada

Systems and procedures. Public Works and Government Services Canada (PWGSC) took a decentralized approach to preparing its sustainable development strategy, which required all assistant deputy ministers and chief executive officers to develop and implement a strategy within their area. The Corporate Policy and Planning Sector provided co-ordination and secretariat services for the departmental strategy. The strategy states that an environmental management system is under development, as well as a Green Citizenship program "aimed at motivating employees to adopt green practices in the workplace."

Departmental profile. The strategy states, "PWGSC is uniquely placed to support federal sustainable development priorities in a positive and proactive manner." By way of providing context, the strategy describes some of the legislative, regulatory and international requirements with which the Department must comply.

Issue scan. There is not an explicit issue scan presented in the document. The strategy presents a commitment to continuous improvement in procurement, fleet management, waste management, water conservation, energy efficiency, and land use management. No priorities are indicated.

Consultations. In referring to the establishment of a Green Citizenship program, the strategy tells us that "focus groups, designed to identify the level of support for this initiative among PWGSC employees, have been conducted in all regions and in headquarters...". The Department also shared a consultation draft with selected deputy ministers.

Goals, objectives and targets. The strategy does not explicitly identify goals and objectives; they are dispersed throughout the document. Targets are not presented, although the strategy states, "specific targets in support of continuous improvement have been developed by each part of the Department."

Action plan. The strategy states, "in the transitional period for across-the-board implementation of the PWGSC Environmental Management System, individual branch action plans will detail objectives for each of the elements of the strategy for which that branch is responsible, together with procedures for monitoring performance, measuring and documenting progress, and tracking the nature of and reasons for variances." The branch strategies did contain some targets, but they were not consistently clear, measurable and specific.

Measurement, analysis and reporting of performance. The strategy does not explain how the Department will measure its accomplishments against the targets in the individual branch strategies. However, the Department has initiated a project to develop a tracking and reporting framework for commitments made in the strategy.

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – 1998

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Global Challenges

Chapter 2
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Chapter 3
Responding to Climate Change – Time to Rethink Canada's Implementation Strategy

Chapter 4
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Global Challenges

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Chapter 4
Canada's Biodiversity Clock Is Ticking

1998

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Chapter 2

Working Globally — Canada's International Environmental Commitments

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Working Globally — Canada's International Environmental Commitments

Main Points

2.1 The quality of Canada's environment is affected not only by what Canadians do at home but also by activities outside Canada's borders. Air pollution, the deterioration of the ozone layer, climate change, the depletion of offshore fisheries resources and ocean pollution are all examples of environmental issues that cut across national borders.

2.2 Countries have increasingly recognized this environmental interdependency and have responded by developing a wide range of international environmental agreements. Canada has participated actively in negotiating these agreements and needs to continue doing so in order to protect its national interests.

2.3 Canada has often played a key role in shaping the international environmental agenda, and is a party to a significant number of international agreements dealing with environmental and sustainable development issues. Canada devotes considerable time and effort to developing these agreements. For each agreement, there is a timetable of international work and meetings, as well as a separate domestic process that Canada follows to prepare its negotiating position.

2.4 In entering into these agreements, Canada has made commitments to the international community. Canada, in turn, stands to benefit from the environmental commitments made by the international community.

2.5 A fundamental tenet of international law is that countries will act in good faith to carry out their international obligations. In some cases, this means that they must translate these obligations into meaningful action at home. In other cases, the commitments require countries to undertake co-operative efforts at an international level with other parties to international agreements.

2.6 However, Canada does not systematically track the implementation of its international environmental commitments. As a consequence, Canada does not have an overall picture of how good a job it is doing at meeting the obligations it has undertaken: where it has been successful; what gaps remain; what lessons have been learned. This lack of accessible information is a significant barrier to Parliament's oversight of the implementation of Canada's current and future commitments in this area.

2.7 Having and using adequate information is key to effective management of our commitments. Working with departments, this Office is constructing a publicly accessible data base of Canada's international environmental commitments in an effort to improve accountability by the government to Parliament for their implementation. We will also continue in-depth analysis of the extent to which selected individual agreements are put into effect. We expect, however, that Foreign Affairs and International Trade and Environment Canada will work with other departments on a broader assessment of the extent to which Canada is living up to its obligations under these agreements.

Introduction

The Globalization of Environmental Problems

2.8 The quality of Canada's environment is affected not only by what Canadians do at home but also by activities outside our borders. Air and ocean currents carrying pollutants from other countries directly affect the health and well-being of Canadians. We share natural systems with the United States to the south, and with other circumpolar nations to the north. And we contribute to, and suffer the consequences of, changes in the environment at the global level.

2.9 Transboundary air pollution, the deterioration of the ozone layer, climate change, the depletion of offshore fisheries resources and ocean pollution are all examples of environmental issues that cut across national borders. The long-range transport of air pollution provides a clear example of the Canadian Arctic's vulnerability to the actions of our neighbours (see Exhibit 2.1). Domestic actions alone are often insufficient to protect Canadians and our environment. We need to work with other countries to develop international solutions to international problems.

2.10 Countries have increasingly recognized this environmental interdependency and have responded by developing a wide range of international environmental agreements. Canada has often played a key role in shaping the international environmental agenda, and is a party to a significant number of agreements. In entering them, Canada has made commitments to the international community. Canada, in turn, stands to benefit from the environmental commitments made by the international community.

2.11 A fundamental tenet of international law is that countries will act in good faith to carry out their international obligations. In some cases, this means that Canada must translate these obligations into meaningful action at home. Other international obligations require Canada to co-operate with other parties to international agreements. The increased globalization of environmental problems has made it even more important for nations to act collectively to address them. This has focussed greater attention on countries' efforts to fulfil their commitments. Media coverage of high-profile international agreements such as the *Montreal Protocol on Substances That Deplete the Ozone Layer* and the *United Nations Framework Convention on Climate Change* with its new *Kyoto Protocol* have given the public an indication of the successes achieved and the difficulties encountered by countries, including Canada, in meeting their various international commitments and their domestic policy responses to them.

The quality of Canada's environment is affected not only by what Canadians do at home but also by activities outside Canada's borders.

2.12 Canada's participation in international efforts to develop international solutions to these problems requires a serious commitment of resources. According to the recent Business Plan of Foreign Affairs and International Trade, international programs are a core activity for many departments, with approximately 5,000 public servants devoting more than 50 percent of their time to international issues.

Focus of the Study

2.13 This study is part of an ongoing work program to assess how Canada is doing at meeting its international environmental commitments, and how it can improve its performance. Recent audit work by this Office (see Exhibit 2.2) has focussed on specific agreements, including the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal,* the *Montreal Protocol on Substances That Deplete the Ozone Layer* (the *"Montreal Protocol"),* the *United Nations Framework Convention on Climate*

Exhibit 2.1

Transport of Pollutants into the Arctic



To many Canadians, the Arctic represents a pristine environment. However, studies are showing that this is not the case. Air and water currents carry pollutants from distant parts of the Earth to the Arctic environment. For example, residues of certain pesticides and organochlorine compounds used in Southeast Asia and Central and South America have been found in the Arctic, carried there by air currents. Air currents also carry various pollutants from Europe and Eurasia, forming the reddish-brown haze in winter known as Arctic haze.

Surface ocean currents are responsible for carrying various types of pollutants from Europe and the Gulf of Mexico to the Arctic. The sources of contaminants range from discharges into rivers to ocean dumping and atmospheric deposition, and include radioactive cesium picked up by the currents at the Sellafield nuclear reprocessing plant off the coast of England.

The fragile ecosystem of the Arctic, and its people, are directly affected by the actions of people in other countries and on other continents. By taking steps to engage in collective action, Canada can help protect both the ecosystem and the inhabitants of the Arctic from unwanted transboundary pollution effects.

Source: "The State of Canada's Environment", Government of Canada, Ottawa, 1991

Change and the *Convention on Biological Diversity*. While these audits also cover issues other than the implementation of international commitments, certain of the findings raise concerns about Canada's overall performance with regard to both its international obligations and its domestic policy response to them.

2.14 Our comments in this chapter are directed at international agreements with a primarily environmental focus, and not at those that deal with the broader social and economic aspects of sustainable development. Although this study concentrates on legally binding agreements, it also refers to certain non-binding instruments of recognized international importance.

2.15 This study is more descriptive in nature than our previous work. It provides an overview of the international environmental agenda and Canada's role in its development. It reviews the number and nature of international environmental agreements to which Canada is a party, and the process by which the Government of Canada enters into them. The study then identifies the information needed to assess how Canada is doing at meeting its international environmental commitments, as a first step in a process for that assessment. This information can be used to identify implementation gaps, and to draw lessons that can be applied to the negotiation and implementation of future agreements. For additional information about the scope and objectives of this

Exhibit 2.2

Recent Audit Work by the Office of the Auditor General on Issues with International Environmental Implications

Reference	Conclusions
Responding to Climate Change: Time to Rethink Canada's Implementation Strategy May 1998 Chapter 3	We examined the federal government's role in implementing the National Action Program on Climate Change, which is Canada's response to its international obligations under the *United Nations Framework Convention on Climate Change*. Among other things, we found that no written plan to implement the strategic direction of the program has been developed and that federal, provincial and territorial roles and responsibilities for domestic action on climate change have not been clearly defined.
Canada's Biodiversity Clock Is Ticking May 1998 Chapter 4	Canada's primary response to the *Convention on Biological Diversity* has been the development of the Canadian Biodiversity Strategy. Our audit revealed that federal implementation of this Strategy is still in its early stages, as only two of eight federal biodiversity implementation plans have been completed to date. We question their usefulness as they do not contain timelines, resources to be allocated, expected results or performance indicators. We believe an overall federal implementation plan is a necessary tool to achieve national goals and to judge performance on biodiversity against our international commitments.
Ozone Layer Protection — The Unfinished Journey December 1997 Chapter 27	We looked at Canada's implementation of its international commitments to control the use and production of ozone-depleting substances. Among our conclusions were that "Canada's accomplishments under the *Montreal Protocol* compare favourably with, and in several instances exceed, those of other countries" (paragraph 27.38). However, our report did point out certain weaknesses in the implementation of these obligations in Canada, notably in the inspection activities to ensure compliance with the federal regulatory scheme to control ozone-depleting substances. (section beginning at paragraph 27.51).
Control of the Transboundary Movement of Hazardous Waste April 1997 Chapter 4	Our review of Canada's regime to control the transboundary movement of hazardous waste led us to conclude that "Canada is not in a position to know the extent to which it is living up to its international obligations with regard to preventing illegal traffic at the border" (paragraph 4.107).

study, please refer to the section entitled **About the Study** at the end of this chapter.

Study Findings

Canada and the International Environmental Agenda

The international agenda

Over this century, international environmental agreements have increased in number, scope and diversity of issues covered.

2.16 Countries have been working together on environmental issues for much of this century. The primary tool used by the international community to focus collective action has been international agreements. Formal agreements have been negotiated to establish collective standards of conduct in the form of legally binding obligations among nations.

2.17 Early international agreements, negotiated in an era when state sovereignty over natural resources was the guiding principle, focussed primarily on the regulation of boundary water and fishing rights, and the protection of commercially valuable animals such as migratory birds and fur seals. Over the years, states have increasingly recognized the importance of conserving natural resources and the shared global commons. The United Nations Conference on the Human Environment held in Stockholm, Sweden in 1972 marked the beginning of a comprehensive, multilateral effort to protect, preserve and enhance the environment. Many important agreements were negotiated in the period surrounding this conference: the 1972 *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*; the 1972 *Convention for the Protection of World Cultural and Natural Heritage* and the 1973 *Convention on International Trade in Endangered Species of Wild Fauna and Flora.* By the time of the 1992 Rio Conference on Environment and Development, the number of international agreements with important environmental provisions had risen from a few dozen to several hundred worldwide.

2.18 Paralleling this increase in numbers, the range of issues covered has become more diverse and the scope of agreements has broadened. Exhibit 2.3 provides a brief summary of selected major international environmental agreements. These agreements, covering climate change, air pollution, endangered species, biological diversity and marine pollution, all represent issues that require international co-operation. They also illustrate the significant expansion of scope. Whereas earlier international agreements tended to focus on bilateral control of transboundary pollution and preservation of certain species, the range of issues has since widened to include global pollution control, conservation of ecosystems, and international control of resource use and activities within national borders to protect world heritage sites, wetlands and areas of significant biological diversity.

2.19 The trend toward more international agreements of wider diversity and scope has been accompanied by a third trend: efforts to encourage the broad participation of nations. There has been a growing recognition that global environmental challenges now require an unprecedented degree of collaboration between the industrial and the developing worlds. However, the various parties have discrete and wide-ranging interests, contribute to global environmental problems to varying degrees and have different financial, institutional and technical capacities to address the problems.

2.20 As a consequence, recent international environmental agreements have incorporated mechanisms that not only encourage nations to undertake commitments but also provide them with the means of fulfilling them. This includes differentiating commitments according to the capacities of countries and the extent to which they contribute to environmental

Exhibit 2.3

Selected Major Multilateral International Environmental Agreements

United Nations Framework Convention on Climate Change	• interim objective: to aim to reduce greenhouse gas emissions to 1990 levels by the year 2000; • ultimate objective: to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human interference with the climate system, within a timeframe sufficient to allow ecosystems to adapt naturally to climate change; • to ensure that food production is not threatened; • to enable economic development to proceed in a sustainable manner.
Convention on Long-Range Transboundary Air Pollution	• to protect human beings and their environment against air pollution; • to limit and to gradually reduce and prevent air pollution including long-range transboundary air pollution.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	• to ensure, through international co-operation, that international trade in species of wild flora and fauna does not threaten the conservation of the species concerned; • to protect certain endangered species from overexploitation by means of a system of import-export permits.
Convention on Biological Diversity	• to ensure the conservation of biological diversity and the sustainable use of its components; • to promote a fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to those resources and transfer of relevant technologies, and by appropriate funding.
International Convention for the Prevention of Pollution from Ships (MARPOL)	• to control pollution from ships by requiring parties to adopt standards for the design, construction and operation of ships and their equipment, as well as port facilities; • to eliminate pollution of the sea by oil, chemicals and other harmful substances that might be discharged in the course of operations; • to minimize accidental releases of oil as a result of collisions or standings by ships and by fixed or floating platforms.
North American Agreement on Environmental Co-operation	• to foster the protection and improvement of the environment in Canada, the United States and Mexico and to promote sustainable development based on co-operation and mutually supportive environmental and economic policies; • to increase co-operation to better conserve, protect and enhance the environment, including the development and improvement of environmental laws, regulations, procedures and policies; • to support the environmental goals and objectives of the North American Free Trade Agreement (NAFTA); • to enhance compliance with, and enforcement of, environmental laws and regulations.
Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)	• to control the transboundary movement of hazardous wastes; • to promote environmentally sound management of waste including disposal and recovery operations; • to assist developing countries and countries with economies in transition in environmentally sound management of hazardous and other wastes.
Montreal Protocol on Substances That Deplete the Ozone Layer	• to protect human health and the environment against adverse effects resulting or likely to result from human activities that modify or are likely to modify the ozone layer; • to equitably control and eventually eliminate total global emissions of ozone-depleting substances; • to phase–out production and consumption of certain ozone-depleting substances, as well as to reduce and eliminate trade in these substances.
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)	• to encourage the conservation and wise use of wetlands by national action and international co-operation; • to stem the progressive encroachment on and loss of wetlands now and in the future; • to include national wetlands in a List of Wetlands of International Importance.
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)	• to control and prevent marine pollution caused by dumping at sea of wastes and other matter from vessels, aircraft, platforms and other man-made structures; • Annexes I and II to the Convention describe the wastes or other matter for which dumping is either banned or is made subject to the prior obtention of a permit; • Annex III sets out factors to be considered in establishing domestic permit systems.

problems. The *Montreal Protocol*, for example, provides a grace period for developing countries to comply. Other techniques involve providing financial assistance to help less developed countries pay for implementation measures they otherwise could not afford, as well as providing for technology transfer and exchange of information.

Legally binding agreements and non-binding instruments are tools to encourage nations to work toward common goals.

Legally binding agreements vs. non-binding instruments

2.21 Although international environmental agreements vary widely in form and substance, they all create binding legal obligations on countries that become party to them. They are agreements between states or between states and international organizations, and are governed by international law. They are called by a variety of names such as treaty, convention and protocol.

2.22 However, the international community also resorts to a variety of non-binding instruments to encourage nations to work toward common goals. These include international declarations of principle, codes of conduct, guidelines, and resolutions of international bodies such as the United Nations General Assembly. Prominent examples of non-binding instruments are the 1972 *Stockholm Declaration on the Human Environment* and the 1992 *Rio Declaration on Environment and Development*. Both set out general principles of environmental protection and sustainable development to guide the conduct of nations. Neither is legally binding.

2.23 Legally binding agreements are used when there is sufficient consensus within the international community on the concrete steps required to meet prescribed goals and targets. Non-binding instruments tend to be used in situations where nations are unwilling to bind themselves initially to legal obligations but recognize the need to commit to working toward a common solution (see Exhibit 2.4).

2.24 With the proliferation of international environmental agreements, a common thread or template has developed for the types of provisions generally found in legally binding agreements. Exhibit 2.5 outlines the typical features of such an agreement.

Compliance issues at the international level

2.25 **New focus on implementation and compliance.** Until very recently, the efforts of the international community had been concentrated on developing new international environmental agreements. However, there has been growing recognition that for these agreements to

Exhibit 2.4

Importance of Non-binding Instruments

Non-binding instruments have made important contributions to international environmental law and policy making. The very fact that they do not generate legal obligations gives this approach advantages over the negotiation of legally binding agreements:

- Nations often may be more willing to enter into non-binding instruments in situations where scientific evidence is inconclusive but where nonetheless a precautionary approach is required, or else where economic costs are uncertain or burdensome.
- The formative process is not as lengthy, which allows these instruments to be negotiated and to be endorsed more quickly than legally binding agreements. In addition, there are no time delays in their coming into force as there are for legally binding agreements.
- Non-binding commitments carry a moral and political authority that may affect state behavior through the pressure of "international public opinion" as if they were legal in nature.
- States often incorporate principles and concepts (such as the precautionary principle) derived from non-binding instruments into their domestic laws and policies, thereby laying the foundation for their participation in later negotiating legally binding international agreements.

accomplish their objectives, greater attention must be paid to ensuring that the nations who are party to them actually carry out their obligations. Nonetheless, a lack of both compliance information and compliance mechanisms presents serious constraints to ensuring compliance.

2.26 Limited compliance information. Many international environmental agreements require parties to report on their progress in implementing the agreement. The information supplied varies according to the subject matter of the accord; for example, numbers of permits issued for controlled activities such as dumping or transborder movement of hazardous waste, or data on air emissions.

2.27 Reporting on efforts to implement agreements is the backbone of compliance. However, the effectiveness of reporting mechanisms has been called into question. A 1992 study carried out by the General Accounting Office of the United States concluded that, for the international agreements it examined, information was reported late, incompletely or not at all, making it impossible to gain a comprehensive view of compliance. Although, under many agreements, secretariats have provided parties with standardized formats to facilitate and encourage reporting, poor reporting in developing countries is often related to a lack of financial and technical resources to gather data.

2.28 Recently, there have been some initiatives to study and compare national implementation and compliance under certain international agreements in selected countries. The data base described in paragraph 2.77 is one such attempt to assemble information to build a key public accountability tool for Canada's implementation efforts.

2.29 Limited compliance mechanisms. The *Vienna Convention on the Law of Treaties* requires that treaty commitments be carried out in good faith. This is one of the foundations of international law. In theory, if a nation fails to abide by its commitments, other parties to an agreement can hold it to account. Many international environmental agreements include dispute settlement provisions that require parties to negotiate in good faith when disputes arise over the interpretation or application of the agreement. Some agreements also contain non-compulsory dispute settlement mechanisms, such as arbitration or hearings before the International Court of Justice.

2.30 In practice, action to enforce international environmental obligations is rarely initiated. Instead, countries are held accountable in large part through the force

Greater attention must be paid to ensuring that international environmental obligations are fulfilled.

International environmental agreements typically have the following main components:

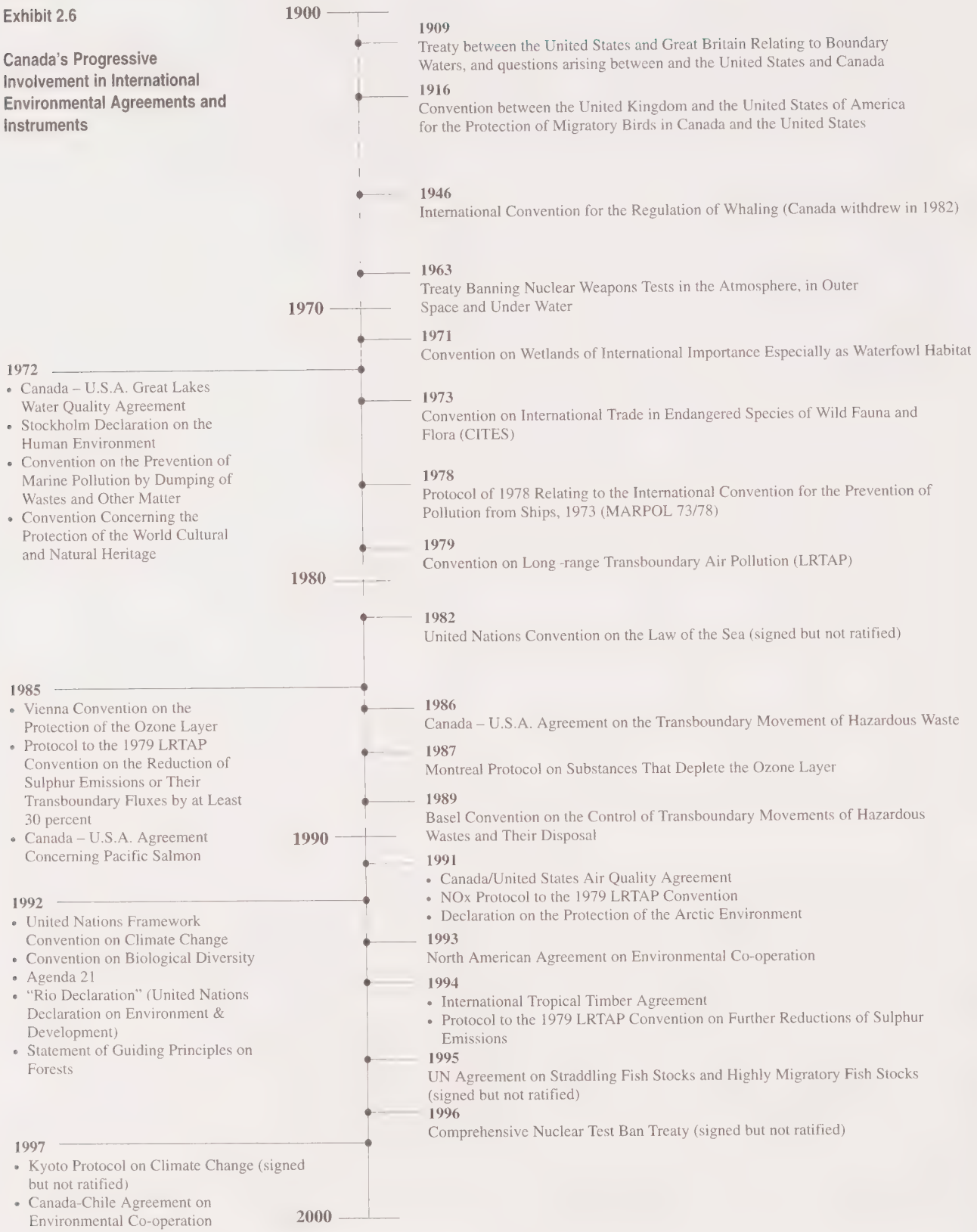
- An introductory preamble and, in some cases, a statement of guiding principles
- A statement of objectives of the agreement
- Substantive commitments by the parties
- Provision for establishing a secretariat or similar organizational body with administrative and co-ordinating functions
- A requirement for the parties to report on their efforts to implement and comply with agreement obligations
- Provisions for monitoring, reviewing and amending the agreement
- Dispute settlement provisions
- Provisions for regular meetings of the parties to develop and approve work programs, to discuss implementation issues, and to update the agreement through Protocols or Annexes

Exhibit 2.5

Typical Features of an International Environmental Agreement

Exhibit 2.6

Canada's Progressive Involvement in International Environmental Agreements and Instruments



of peer pressure and domestic and international public opinion. The risks associated with non-compliance, including erosion of a country's reputation both at home and abroad, are perceived as persuasive elements to promote the fulfilment of treaty obligations. The media attention brought to bear on worldwide compliance issues regarding prominent international agreements such as the *United Nations Framework Convention on Climate Change,* and the issuance of "performance report cards" by international environmental non-government organizations, may well serve as additional prompting to encourage nations to carry out their commitments.

2.31 The new mechanisms to promote and encourage compliance, referred to in paragraph 2.20, include:

- financial assistance and other financial incentives to help less developed countries pay for implementation measures;

- technology transfer and information exchange to facilitate access by less developed countries to environmentally friendly technology as well as to training and information;

- non-confrontational and conciliatory procedures to deal with situations of non-compliance. For example, the non-compliance procedures under the *Montreal Protocol* are designed to provide maximum opportunities to promote compliance, rather than to inflict punishment. They allow for self-reporting on compliance problems, enable parties to raise concerns about the conduct of other parties and establish an Implementation Committee that makes recommendations to encourage compliance;

- trade measures to discourage trade with countries not party to an agreement and to encourage those countries to become parties to the agreement;

- trade sanctions to punish behaviour of parties to an agreement whose actions contravene the provisions of the agreement; and

- joint or shared implementation whereby, for example, a country can partially meet its emission reduction targets by offsetting its domestic emissions with projects to finance emission reductions in other countries.

Canada's involvement

2.32 The global trend toward more agreements that address increasingly complex issues is reflected in Canada's international environmental activities. Canada's involvement dates to as early as 1909 with the conclusion of the *Boundary Waters Treaty between the United States of America and Great Britain* (acting on behalf of Canada). The treaty established the International Joint Commission — the first permanent joint organization between Canada and the United States — to apply the rules for boundary water use set out in the treaty. The accord was also one of the first international agreements containing provisions relating to transboundary pollution.

Canada is a party to or has endorsed over 230 binding international environmental agreements and non-binding instruments.

2.33 Since then, Canada has signed an increasing number of agreements. It is now a party to or has endorsed over 230 binding international agreements and non-binding instruments dealing with environmental issues. Exhibit 2.6 is a time line showing when certain key international environmental agreements and instruments were signed or endorsed by Canada. Exhibit 2.7 illustrates the accelerating pace of Canada's involvement in international environmental diplomacy since the turn of the century.

2.34 Until the early 1940s, Canada was entering into one or two agreements a decade, many of them bilateral agreements with the United States that dealt with issues of transboundary water use. The number of agreements and their scope increased gradually over the next

Canada has played an active role in the development of a variety of international environmental accords.

20 years to include multilateral agreements, in areas such as whaling and nuclear testing. As noted earlier, the international environmental agenda picked up pace significantly following the Stockholm Conference in 1972, and reached a peak in the early 1990s. During that time, Canada concluded a mix of bilateral agreements (mainly with the United States) and multilateral agreements (having global or regional implications).

2.35 As caretaker of one of the largest and most ecologically diverse territories in the world, Canada faces a wide range of environmental issues. The international agreements signed by Canada reflect this diversity of concerns. They cover subjects ranging from the protection of fragile Arctic ecosystems to transboundary movement of hazardous waste, from the protection of wild flora and fauna to air and atmospheric issues.

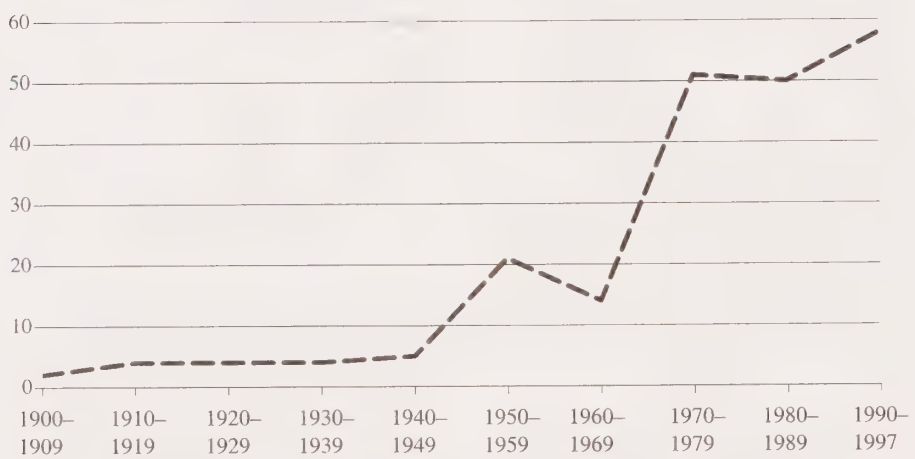
2.36 The subject of the largest number of our international environmental agreements is fisheries and ocean issues (see Exhibit 2.8). Canada's extensive coastline has given it a long-standing interest in maritime issues. These agreements include a range of bilateral, regional, and multilateral fisheries accords as well as pollution protection agreements to prevent marine degradation from dumping or oil spills.

2.37 Many of Canada's international agreements are bilateral and, not surprisingly, are with the United States. Our 9,000 kilometres of shared border and our close trade and economic ties mean that bilateral environmental issues with the United States continue to figure prominently in Canada's international environmental agenda. Important bilateral accords such as the *Canada/US Air Quality Agreement* and the *Great Lakes Water Quality Agreement* have been instrumental in establishing protection regimes over shared air and water resources.

2.38 In addition to being party to a wide range of agreements, over the years Canada has played an active role in the development of a variety of international environmental accords. It has built a reputation for neutrality and fair play and as an honest broker, at times assuming a leading role in global efforts to protect the environment and promote sustainable development. For example, Canada's leadership in establishing the international regime for protection of the ozone layer (the *Montreal Protocol*) is widely acknowledged, as is its central role in the development of the 1995 United Nations

Exhibit 2.7

Number of International Environmental Agreements and Instruments Negotiated per Decade



Source: The information for this exhibit is derived from our inventory of environmental and sustainable development agreements and non-binding instruments signed or endorsed by Canada.

agreement to protect straddling fish stocks and migratory fish stocks.

2.39 Canada also hosts the secretariats for key global and trilateral agreements. The Commission for Environmental Cooperation under the *North American Agreement on Environmental Cooperation* is located in Montreal, as is the Secretariat for the *Convention on Biological Diversity* and the Secretariat for the Multilateral Fund under the *Montreal Protocol.*

2.40 Canada's alliances to foster environmental protection extend to regional and hemispheric agreements in the context of trade relations. The regional *North American Agreement on Environmental Cooperation* with Mexico and the United States was concluded in 1994. A similar co-operation agreement was signed with Chile in 1997, and it is anticipated that environmental considerations will form part of the discussions in upcoming negotiations for a proposed free trade agreement covering North, Central and South America.

The current negotiating agenda

2.41 Canada continues to play a part in ongoing international efforts to deal with environmental and sustainable development concerns at both the regional and global levels. Exhibit 2.9 illustrates the types of agreements that Canada is in the process of negotiating. A number of them are new multilateral agreements; others involve new protocols under existing agreements. Pollution and hazardous substances figure prominently in the current negotiating agenda, as does biotechnology.

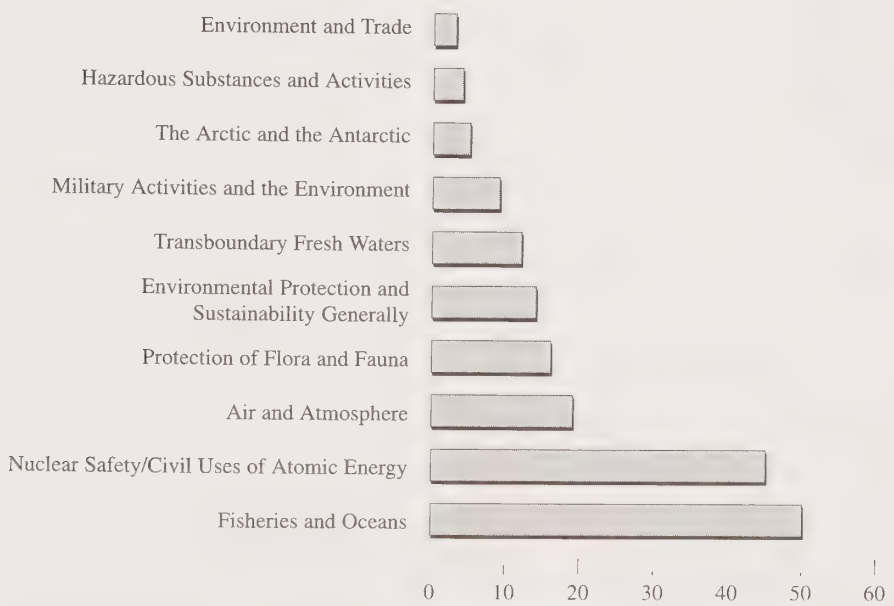
Canada devotes considerable time and effort to developing international environmental agreements.

Developing International Environmental Agreements

2.42 Canada devotes considerable time and effort to developing international environmental agreements. For each agreement, there is a timetable of international work and meetings as well as a separate domestic process that Canada follows to prepare its negotiating position.

Exhibit 2.8

Subject Matter Covered by Canada's International Environmental Agreements and Instruments



Source: The information for this exhibit is derived from our inventory of international environmental and sustainable development agreements and non-binding instruments signed or endorsed by Canada. We have excluded any agreements signed but not ratified by Canada.

The international process

2.43 The international process for developing multilateral international environmental agreements can be lengthy and cumbersome. This is inevitable when trying to reach consensus among many nations, all with varying levels of industrial development, technical capabilities, resources and environmental priorities or concerns. The process can

Exhibit 2.9

Canada's International Environmental Agenda

New and Emerging Legally Binding Multilateral Agreements

- **International Forests Convention.** Canada is seeking to launch negotiations on this convention that would build upon the *Statement of Guiding Principles on Forests* that emerged from the 1992 Rio Earth Summit. This international convention would establish global rules for sustainable forest management. Canada is part of the Intergovernmental Forum on Forests that was established in June 1997.
- **Global Convention on Persistent Organic Pollutants (POPs).** The long-range transport of POPs from foreign sources is of particular concern to Canada, given increasing evidence of POPs contamination in the Canadian Arctic and the Great Lakes. These pollutants are slow to degrade, accumulate in fatty tissue and bioconcentrate as they move up the food chain. The United Nations Environment Program has decided to convene an intergovernmental negotiating committee to expedite development of a binding global POPs Convention. The first meeting of the Intergovernmental Negotiating Committee will be held June 29 to July 3, 1998 in Montreal.
- **Convention on Prior Informed Consent Procedures to Govern Trade in Certain Hazardous Chemicals and Pesticides.** The Convention will put existing United Nations Environment Program (UNEP) and Food and Agriculture Organization (FAO) guidelines on prior informed consent procedures into legally binding form. These procedures provide a means for obtaining and disseminating decisions of importing countries regarding the import of banned or severely restricted chemicals and certain pesticides. The Convention will be open for signature at a diplomatic conference to be held in Rotterdam, the Netherlands in September, 1998.

Protocols under Existing International Environmental Agreements

- **Biosafety Protocol under the Convention on Biological Diversity.** This protocol is intended to establish procedures for the safe transfer, handling and use of living modified organisms resulting from biotechnology that may have an adverse effect on the conservation and sustainable use of biological diversity. Negotiations for this Protocol should be concluded by the end of 1998.
- **Liability and Compensation Protocol under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.** This protocol would establish a civil liability framework to provide timely compensation to victims of accidents arising from the transboundary movement of hazardous wastes. Negotiations on this Protocol are expected to continue well into 2000.
- **Comprehensive Protocol to the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter.** This Protocol, which substantially modifies and updates the provisions of the original 1972 Convention, was finalized and adopted by certain countries in 1996. Canada is expected to accede to the Protocol once domestic legislative amendments are in place.

Three further Protocols under the United Nations Convention on Long-range Transboundary Air Pollution (a regional convention encompassing members of the Economic Commission for Europe as well as Canada and the United States):

- **Protocol on Persistent Organic Pollutants (POPs).** This regional protocol covers all East and West European countries as well as the U.S. and Russia, some of the major sources of POPs of concern to Canada. Canada chaired the working group that produced the draft protocol, which should be ready for signature in June 1998.
- **Protocol on Heavy Metals.** The main impetus for this protocol is the growing realization that heavy metals such as lead, cadmium and mercury travel long distances in the atmosphere and are deposited far from their source. It is slated for signature along with the POPs Protocol in June 1998.
- **Nitrogen Oxides and Related Substances Protocol.** This protocol is intended to establish emission control measures to combat acidification, ground-level ozone and other consequences associated with the transboundary atmospheric movement of pollutants. Negotiations on the protocol are scheduled to begin in 1998.

span several years, and proceeds in stages. Exhibit 2.10 is a simplified representation of what is a complex process for multilateral agreements.

2.44 Initial call to action. The process generally begins with the scientific community identifying a hazard, and building sufficient scientific certainty to persuade governments to take collective action. This stage in the process can take a significant amount of time. For example, scientists had identified chlorofluorocarbons (CFCs) as contributors to the thinning of the stratospheric ozone layer as early as 1974. However, it was not until the discovery of a large hole in the ozone layer over the Antarctic in 1985 that countries agreed to the control measures set out in the 1987 *Montreal Protocol.*

2.45 Negotiation. Once there is an international consensus on the need for joint action on a problem, negotiations are normally launched through an international organization, often a United Nations body. Country representatives meet periodically in working groups to negotiate the text of a draft agreement. Over an 18- to 24-month period, four or five sessions may be required, each lasting one to two weeks. Between sessions, nations develop and refine their own positions in light of their particular domestic interests and capabilities.

2.46 Once the working groups have developed a draft agreement, negotiating delegations from each nation meet in a formal plenary session. They then break out into smaller, more informal sessions to negotiate the text of the agreement. For example, six negotiating sessions of two weeks each over a period of approximately 16 months were required to conclude the *United Nations Framework Convention on Climate Change*. The negotiating sessions were supplemented by other informal meetings among groups of countries. To promote a particular position, nations often seek alliances with other countries seen to have similar interests.

2.47 Signature. Once the text has been finalized, a diplomatic conference is convened to conclude the agreement and approve it in principle. The agreement is then opened for signature. Signature can take place either immediately or over a period of months after the convention is finalized.

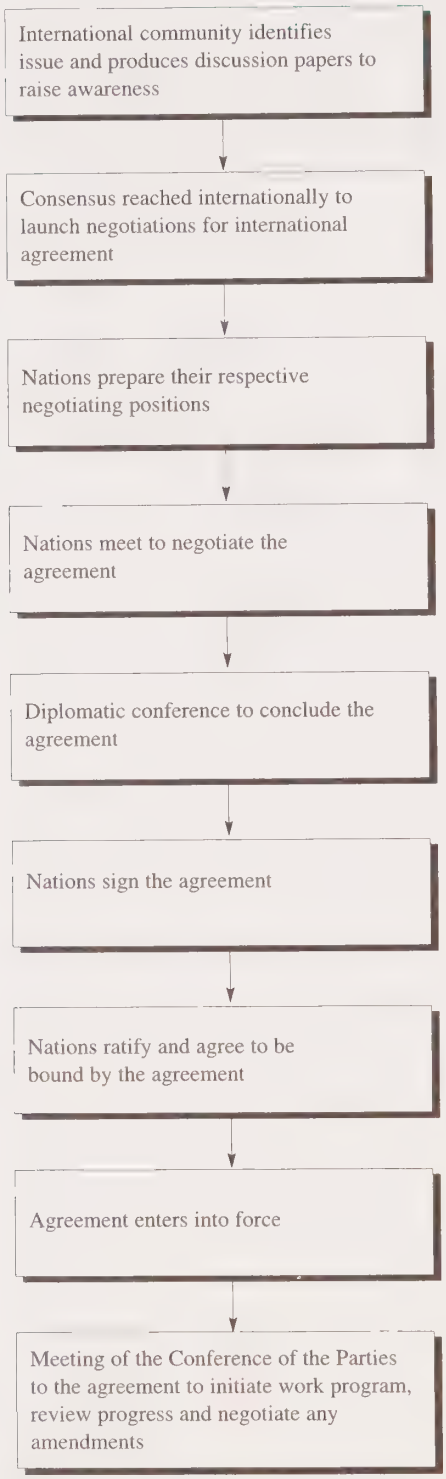
2.48 Ratification. Signature of an agreement does not mean that the signing nation is automatically bound by it. Most multilateral treaties also require the signing states to ratify the treaty. This is often accomplished by the country issuing an instrument of ratification. In Canada, both signature and ratification require federal order-in-council approval. In the interim period between signature and ratification, countries are obliged under international law to refrain from doing anything to frustrate the intent of the treaty.

2.49 As a matter of policy, Canada will not ratify a convention until it is sure that it is in a position to comply with the accord. This can mean enacting laws or regulations to meet new international standards, ensuring that the necessary administrative structures are in place or adopting appropriate policies and strategies. In Canada, these implementing activities may be required at both the federal and provincial levels.

2.50 Entry into force. The date a treaty enters into force is the date from which its provisions can legally be enforced against the nations that have ratified it. In some cases, the treaty provisions will provide that it enters into force after a specified number of nations have ratified it. Often, before a treaty enters into force there is a process by which an interim work program is developed to ensure that no time is lost in implementing the agreement's provisions once it does come into force.

Exhibit 2.10

Developing International Environmental Agreements



2.51 Meetings to review and amend. Treaties provide for ongoing meetings of the parties at regular intervals. Initially, the parties choose a location for the secretariat office, and establish a budget and schedule for regular meetings. Thereafter, parties meet to develop, approve and review work programs and budgets, review progress, make decisions about the interpretation of the agreement's provisions and, if appropriate, make adjustments or amendments to take into account new scientific or technological advances. In many cases, treaties provide that parties must report to an identified supervisory body about measures they have taken to implement the provisions of the treaty.

The domestic process

2.52 To participate effectively in these international processes, Canada must develop a negotiating position to take to the international bargaining table. Exhibit 2.11 illustrates the domestic process for preparing Canada's negotiating position. Although all the elements shown form part of the process, their sequence and the importance attached to each one may vary from one agreement to another.

2.53 Canada's domestic process is centered on consultation. The cross-cutting nature of environmental issues and the structure of our federal system of government make consultation integral to the development of Canada's negotiating position. At the interdepartmental level, consultation helps ensure that the impact of proposed agreements on policy and sectoral interests are addressed across the federal government. Provincial and territorial consultation occurs when local natural resources or regional business interests are affected, and when provincial and territorial action is required for implementation. Consultations are also carried out with non-governmental organizations representing business, industry, environmental, labour and other interests. The process is an iterative one; consultations on the Canadian position are repeated after each international round of negotiations on a particular agreement.

2.54 The negotiating stance. In some instances, Canada will negotiate an agreement on the basis of programs or laws it already has in place. In these situations, Canada would not be required to initiate any new domestic programs to comply with its international obligations. Such was the case with the 1985 Protocol on sulphur emissions under the *Convention on Long-range Transboundary Air Pollution*. That Protocol required parties to reduce emissions by 30 percent — a target that Canada had already established and was implementing through its Canadian acid rain abatement program.

Consultation is integral to the development of Canada's negotiating position.

2.55 In other cases, however, signing an agreement will require new domestic action. For example, the *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Other Matter* led to regulatory changes to bring Canada's standards into line with new international norms.

2.56 Departmental roles and responsibilities. Foreign Affairs and International Trade has the mandate to manage and conduct international negotiations, and to sign the resulting agreements on behalf of Canada. Although this Department is always part of the negotiating delegation, the lead responsibility is often given to or shared with the federal department having the expertise in the area of concern. In the environmental field, Environment Canada plays a key role in this process. Both the Department of Justice and Foreign Affairs and International Trade share the responsibility for advising on the legal implications of entering into treaties. For Foreign Affairs and International Trade, the international trade portion of its mandate poses a challenge in balancing the trade and environmental aspects of certain agreements.

Exhibit 2.11

Developing Canada's Negotiating Position

2.57 Interdepartmental consultations. The lead department uses the information developed by international scientific expert groups or organizations to prepare an initial draft Canadian position. This draft is then circulated to other federal government departments for comment. The objective is to obtain a view that is representative of the federal government as a whole.

2.58 A core group of federal departments most directly concerned with the subject matter of the agreement is generally formed, with a steering committee that focusses on ensuring that deadlines for preparing Canada's negotiating position are met. For agreements with an environmental focus, this core group often comprises Agriculture and Agri-Food Canada, Environment Canada, Finance Canada, Fisheries and Oceans, Health Canada, Industry Canada, Natural Resources Canada, and Transport Canada. The membership changes depending on the topic of the agreement under negotiation.

2.59 Provincial and territorial consultation. Negotiation, ratification and implementation of international environmental agreements can pose a particular challenge for Canada because of shared jurisdiction for environmental matters. The federal government has the right to enter into agreements on behalf of Canada. However, implementing them may require action by the provincial and territorial governments if the subject matter of the agreement falls under their jurisdiction. Consultation with provinces and territories, therefore, is a key element not only in building a national consensus on Canada's negotiating position but also in ensuring successful implementation once the agreement is concluded. These consultations are often done through the Canadian Council of Ministers of the Environment, which consists of the environment ministers of the federal, provincial and territorial governments. Sometimes other ministerial councils, such as that of energy ministers, are also involved.

2.60 Each international negotiation session for an agreement requires a series of parallel domestic efforts to brief provinces and territories on new developments and to seek further input as the Canadian negotiating position evolves. The interplay between the domestic and international processes in negotiating international agreements poses a significant challenge, not only to provide adequate resources but also to build sufficient flexibility into the domestic process to allow for a timely and comprehensive response from provinces and territories.

Shared jurisdiction for environmental matters can pose a particular challenge for Canada.

2.61 Other consultations. During the process, and depending on the subject matter of the agreement, the input of representatives from industry, environmental, labour, Aboriginal and other organizations is sought. Canada has been innovative in that it is one of the few nations to include representatives from non-governmental organizations on its negotiating delegations. This policy was instituted at the 1992 Rio Conference on Environment and Development and continues to date for many of the new agreements and protocols currently under negotiation.

2.62 Informal consultations may also be carried out through staff in Canadian diplomatic missions in selected foreign countries. This can give the government an early indication of the nature and range of positions being taken by other countries.

2.63 Refining the negotiating position. After the consultation process is completed, the lead department reformulates the draft position and circulates it for final comment among the federal departments, provincial and territorial governments and non-governmental organizations affected. A Memorandum to Cabinet is prepared by the lead department, setting out a proposed Canadian position and

describing possible alternatives. It provides background information on the issues, sets out the consequences of proposed courses of action and provides the parameters within which the negotiation position is developed. It may be required at various points in the negotiating process depending on a number of factors, including the nature of the subject matter of the agreement.

2.64 Before the delegation attends the international negotiations, Foreign Affairs and International Trade issues delegation instructions, based on Cabinet direction when provided, to guide the Canadian delegation at the international negotiating table.

Sufficient time and effort must be directed toward translating international commitments into meaningful action at home and abroad.

2.65 As already noted, the international process involves several negotiating sessions. This necessitates repeating the domestic consultation process at each stage to shape the Canadian position in light of developments at the international negotiating table.

Implementing International Environmental Agreements

2.66 As the previous sections illustrate, countries such as Canada devote a considerable amount of time and energy to the negotiation of international environmental agreements. The development of these accords has been a major preoccupation of the international community and underlines the importance attached to this tool of international co-operation.

2.67 However, more attention is now being brought to bear on the implementation of treaty commitments. Given the enormous potential of these accords to transform the ways humanity uses the planet, putting environmental treaty commitments into effect requires that sufficient time and effort be directed toward translating them into meaningful action at home and abroad.

2.68 Exhibit 2.12 sets out some of the commitments Canada has made under three key international agreements: the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, the *Montreal Protocol on Substances That Deplete the Ozone Layer* and the *Convention on Biological Diversity*. These treaties illustrate the range of obligations Canada has assumed, including reporting, technology transfer, institution of control measures, information exchange and financial assistance. The exhibit also shows that implementation may require not only national but also international measures.

2.69 Domestic implementation. On the domestic front, it may mean enacting new laws and regulations to bring domestic legislation into harmony with international requirements. In the Canadian context, action by more than one level of government may be required. It may also entail administrative action such as establishing programs for research, monitoring and enforcement. For example, the *Montreal Protocol* required Canada to adopt new regulations to bring its control measures for ozone-depleting substances into line with international norms. Similarly, federal legislation and regulations reflect the import/export permit system requirements under the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*. The federal government adopted a federal Biodiversity Strategy to fulfil a requirement under the international convention. All three agreements require Canada to submit reports to a central international body on various aspects of its implementation performance.

2.70 International implementation. Internationally, agreements may commit Canada to contribute toward enhancing the implementation capacity of other nations through information sharing, technology transfer or financial aid. Encouraging implementation and compliance by developing countries

through these various forms of assistance is a major trend of recent international environmental agreements. Both the *Montreal Protocol* and the *Convention on Biological Diversity* illustrate this trend. For instance, the *Montreal Protocol* requires parties to provide financial assistance to qualified countries who are parties to the Protocol, to assist them in implementing their control obligations. In addition, both the *Montreal Protocol* and the *Convention on Biological Diversity* oblige Canada to facilitate the transfer of technology to developing countries as well as to promote technical and scientific co-operation.

Improving Our Knowledge Base

2.71 While Canada is party to a large number of international environmental agreements, it does not systematically track its performance in implementing its commitments under them. Because information on implementation and compliance with international environmental agreements is spread throughout the various branches and divisions of departments with implementation responsibility, Canada does not have an overall picture of how good a job it is doing at meeting its international obligations: where it has been successful; what gaps remain; what lessons have been learned. This failure to consolidate information is a significant barrier to Parliament's oversight of the implementation of Canada's international environmental commitments.

2.72 A thorough assessment of Canada's implementation performance would require, at a minimum, information in four areas:

- What has Canada committed itself to do?
- What actions are required to meet those commitments?
- What actions have been taken?
- How successful have these actions been in fulfilling Canada's commitments?

2.73 What are Canada's commitments? In the course of carrying out this study, we were unable to locate a comprehensive listing of the environmental and sustainable development commitments Canada has made. In other words, there is no ready answer to the first question.

2.74 The Treaty Section of Foreign Affairs and International Trade does publish annually a list of all bilateral and multilateral treaties in which Canada is involved, ranging from culture to peacekeeping, from trade to development aid. A separate listing is kept for non-binding Memoranda of Understanding. The treaty list shows dates of signature, ratification, and entry into force of an agreement and assigns it a Canada Treaty Series number for reference purposes.

Canada does not have an overall picture of how good a job it is doing at meeting its international obligations.

2.75 The list provides no information on the specific commitments made under each agreement. This type of information can be obtained by consulting the treaty texts available in print form from the Treaty Section at Foreign Affairs and International Trade. Electronic versions of certain texts are available from international organizations such as the United Nations Environment Program or convention secretariats. Various implementing departments such as Environment Canada and Fisheries and Oceans have lists of agreements that fall under their respective mandates. The texts of certain international environmental agreements are also available from departments.

2.76 Developing an inventory. As a first step toward enhancing the understanding of Canada's performance in implementation, we have compiled an extensive inventory of international environmental and sustainable development agreements and instruments signed or endorsed by Canada. The information for this inventory was

Exhibit 2.12

A Sampling of Commitments under Three Key International Environmental Agreements

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973)	Montreal Protocol on Substances That Deplete the Ozone Layer, 1987	Convention on Biological Diversity, 1992
Control Measures		
• Parties are required to establish an import/export permitting system to regulate trade of specimens of species covered by the Convention (animals and plants requiring protection are classified into three appendices). • Parties are required to follow requirements governing the form and treatment of trade permits and certificates and the identification of specimens, etc. • Canada must designate a management authority and scientific authority for the purpose of the Convention.	• Parties are required to try to minimize use and emissions of ozone-depleting substances (ODS) by all practical steps. • Canada is required to reduce and eliminate the production and "consumption"[1] of "controlled substances" according to binding targets and schedules. Phase-out schedules vary according to the class of ODS, e.g. the phase-out date for chlorofluorocarbons (CFCs) was January 1, 1996. Canada is required to phase out Methyl Bromide by 2005.	• Canada is required to develop new strategies, plans or programs, for the conservation and sustainable use of biological diversity[2] (or adapt existing ones). • Parties are required to establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity. • Parties are obliged to rehabilitate and restore degraded ecosystems and promote the recovery of threatened species by developing and implementing plans or other management strategies. • Canada is required to regulate, manage or control the risks associated with the use and release of living organisms modified by biotechnology that are likely to have adverse environmental impacts.
Trade Measures		
• Canada is required to take measures to enforce the provisions of the Convention and prohibit trade in specimens in violation thereof (by penalizing trade in, or possession of, such species and confiscating and returning such specimens).	• With regard to CFCs and halons, parties are required to ban their import from, and export to, any country not party to the Protocol. • Parties are required to discourage the export to any country that is not a party to the Protocol of technology for producing and utilizing CFCs, halons, etc.	
Financial Assistance		
	• Canada is urged to provide funding domestically and on a bilateral basis to developing countries to undertake research and development and activities on ODS alternatives for laboratory and analytical uses. • For the period 1997–1999, Canada contributes over $US 5 million annually to the Multilateral Fund established under the Protocol. The Fund provides financial assistance to qualified developing country parties to assist them in implementing their control obligations.	• Canada is required to provide financial support and incentives for national activities that are intended to achieve the objectives of the Convention. • Canada is required to provide new financial resources to developing countries that are parties to the Convention to enable them to meet the costs associated with implementing measures for the conservation and sustainable use of biological diversity.

Notes: [1] Under the *Montreal Protocol* "consumption" does not mean "use"; rather it is a formula for the net supply of ODS into a country.
[2] Biological diversity means "the variability among living organisms from all sources; this includes diversity within species, between species and of ecosystems".

Exhibit 2.12 (cont'd)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973)	Montreal Protocol on Substances that Deplete the Ozone Layer, 1987	Convention on Biological Diversity, 1992
Exchange Of Information and Data Collection		
• Parties are required to maintain records of trade in species covered by the Convention, (including numbers and types of permits granted, the countries with which trade occurred and types of species traded).	• Parties are required to share information on best technologies, alternatives to controlled substances and public education.	• Parties are required to facilitate the exchange of information relevant to the conservation and sustainable use of biological diversity, taking into account the special needs of developing countries.
Reporting		
• As a party, Canada is required to forward reports to the Convention secretariat describing the following: data on trade in regulated species; and a description of implementation and enforcement measures taken.	• Canada is required to submit a yearly report to the United Nations Environment Program containing data on its production, destruction, trade and recycling of controlled substances.	• Canada is required to submit reports to the Conference of the Parties on measures taken to implement the Convention and their effectiveness in achieving its objectives.
Monitoring		
• Canada is required to monitor export permits granted, and actual exports of certain species and take measures if necessary to maintain the species consistent with its role in the ecosystem and well above the level at which it may become threatened with extinction.		• Parties are required to monitor the effects of processes and activities that have or are likely to have significant adverse impacts on conservation and sustainable use of biological diversity.
Co-operation		
	• Parties are required to co-operate in promoting research, development and exchange of information on the best technologies for improving containment, recovery, recycling or destruction of controlled substances or otherwise reduce their emissions.	• Canada, as a Party, is required to promote international technical and scientific co-operation, particularly with developing countries, for the conservation and sustainable use of biological diversity.
Technology Transfer		
	• Parties are required to take steps to ensure that the best available environmentally safe substitutes (for ODSs) and related technologies are expeditiously transferred to developing countries that are parties to the Protocol.	• Parties are required to undertake to provide and facilitate access for transfer of technologies related to the conservation and sustainable use of biological diversity under fair and favourable terms especially to developing countries (consistent with the adequate protection of intellectual property rights).

gathered from a wide variety of sources, both within the federal government and internationally. We developed a classification scheme based on systems used by Foreign Affairs and International Trade and by the United Nations and other international organizations. To date, this inventory contains more than 230 binding international agreements and non-binding instruments.

A publicly accessible data base of Canada's international environmental commitments is being developed.

2.77 A data base on Canada's commitments. The inventory is the foundation for a data base on Canada's international environmental commitments, currently being constructed by the Commissioner of the Environment and Sustainable Development. The initial work on the data base has focussed on legally binding agreements. This work is being carried out in collaboration with Foreign Affairs and International Trade, Environment Canada and other federal departments. The data base is intended to be a publicly available information tool.

2.78 It will provide a detailed list and classification of all commitments made under each agreement. It will also contain more general information on the purpose of each agreement; its geographic scope; the subject matter covered; dates of signature, ratification or amendment; and the lead or responsible federal department. Further information on the data base is contained in the Appendix entitled "About the Data Base".

2.79 Next steps. Over the next year, the data base will be accessible through the Internet as a "work in progress", in order to obtain comments and suggestions to improve its usefulness. At the same time, we will add information on the remaining treaties from our inventory. Once the initial input of data on treaties is completed, Foreign Affairs and International Trade has agreed to assume responsibility for the completion and ongoing maintenance of this information tool.

2.80 While the data base will help to identify the commitments Canada has undertaken, it is only the first step in assessing Canada's implementation performance. The remaining steps — cataloguing and assessing implementation measures to answer the remaining three questions set out in paragraph 2.72 — require considerable analysis.

2.81 The data base has been designed to provide details on implementation measures for each commitment. The task of completing the information at this level should fall on the departments that know the complete range of implementing programs and actions in place. We expect that Foreign Affairs and International Trade and Environment Canada will work with other departments on a broader assessment of Canada's implementation performance, to identify gaps and to co-ordinate the effective management of Canada's international obligations for environment and sustainable development issues.

2.82 This study is part of our ongoing work to review how Canada is doing at meeting its international environmental commitments, and how it can improve its performance. We will continue in-depth analysis of selected individual agreements. For example, we will be conducting additional work on Canada's climate change commitments, and a review of Canada's efforts to protect the Arctic environment.

Conclusion

2.83 The growing internationalization of environmental problems has increasingly led countries to look to transboundary and global solutions. Particularly since the 1972 United Nations Conference on the Human Environment held in Stockholm, the international environmental agenda has grown, and with it the number, diversity and scope of international agreements.

2.84 Canada has often played a key role in shaping the international environmental agenda, and is a party to a significant number of agreements. In entering into these agreements, Canada has made commitments to the international community and, under international law, is bound to carry out those commitments in good faith.

2.85 As we have noted previously, information on the implementation of and compliance with international environmental agreements is spread throughout the various branches and divisions of departments with implementation responsibility. As a consequence, Canada does not have an overall picture of the extent to which it is meeting its international obligations. This lack of accessible information is a significant barrier to Parliament's oversight of the implementation of Canada's international environmental commitments.

2.86 Information is key to effective management of our commitments. A publicly accessible data base of Canada's environmental commitments is being constructed by this Office as a first step toward enhancing understanding of Canada's performance in implementation. A complete picture on this issue will be obtained only if a broader assessment of the extent to which Canada is living up to its obligations under these commitments is carried out and reported by all departments with implementing responsibilities.

Information is key to effective management of our commitments.

About the Study

Background

This study is part of an ongoing work program to assess how Canada is doing at meeting its international environmental commitments, and how it can improve its performance. Recent audit work by the Office has focussed on specific agreements, including the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, the *Montreal Protocol on Substances That Deplete the Ozone Layer*, the *United Nations Framework Convention on Climate Change* and the *Convention on Biological Diversity*. While the scope of these audits generally covers more than the implementation of international obligations, certain findings raise concerns about Canada's overall performance with regard to both its international obligations and its domestic policy response to such obligations.

In his first report, the Commissioner of the Environment and Sustainable Development undertook to create an inventory of Canada's international environmental commitments. This study provides background information on the development of these agreements and is part of the Commissioner's ongoing work plan to review the extent to which Canada is meeting these commitments.

Scope

This study concentrates on international agreements with a primarily environmental focus, and does not address those that deal with the broader social and economic aspects of sustainable development. It focusses on legally binding agreements but also refers to certain non-binding instruments of recognized international importance. Moreover, it looks at only international agreements signed by Canada and not at international commitments entered into by other levels of government.

Objectives

The objectives of the study were:

- to prepare an inventory of Canada's international environmental and sustainable development agreements and to commence constructing a data base that will serve to identify the range of commitments under these agreements;
- to give background information on the international context that has fostered the creation of these agreements, on the process for entering into them, and on the nature of implementation measures to be taken;
- to help build capacity within the federal government to exercise oversight on Canada's priorities and commitments with respect to international environmental agreements; and
- to provide baseline information to the Commissioner of the Environment and Sustainable Development to assess the extent to which international obligations are reflected in Sustainable Development Strategies.

Approach

The information for this study was drawn from existing legal and social science literature, as well as from departmental publications. We also conducted a series of interviews with selected federal departments, such as Environment Canada and Foreign Affairs and International Trade, provincial government agencies, and environmental and industry non-governmental organizations.

In accordance with the commitment made in the Commissioner's first report, we have created an inventory and an electronic data base of these agreements. The information was drawn from a variety of sources, including the United Nations Treaty documentation, Foreign Affairs and International Trade's Treaty Series, publications of the Organization for Economic Co-operation and Development, and other reputable sources. We have also solicited information from over 24 federal departments and agencies on their respective roles in the implementation of these commitments.

We worked with Environment Canada and Foreign Affairs and International Trade in designing the data base of Canada's international environmental agreements to ensure ease of use and application by federal departments.

Study Team

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Appendix

About the Data Base

What's in the data base?

The data base is designed to provide users with basic information about international environmental agreements and instruments that Canada has signed or endorsed. The agreements currently in the data base are those with an environmental dimension, including those regarding pollution control and prevention, and use of natural resources. The data base at the time of publication contains legally binding international agreements. It does not at present include non-binding instruments. Although the data base currently focusses on agreements that fall into a narrow definition of environment, the classification scheme permits more broadly defined sustainable development agreements to be incorporated in the future. The structure of the data base also allows other types of documents to be included, such as decisions by international bodies and non-binding memoranda of understanding.

We have compiled an inventory of international agreements and non-binding instruments that deal with environmental and sustainable development issues and that have been signed or endorsed by Canada. Of the more than 230 agreements and instruments in our inventory, the current version of the data base contains detailed information on certain of the legally binding agreements. At the end of this Appendix is a list of the agreements that will be in the public data base as of 31 July 1998. Additional agreements and instruments will be added in the coming months.

The data base is designed to accommodate three different levels of detail: (1) general information about each agreement; (2) specific commitments made; and (3) actions taken in response to a particular commitment. For each agreement, the data base contains core information, including the agreement's objectives, its geographic scope, the dates signed and ratified, amendments, subject matter, and lead federal department.

The second level of information documents all commitments made by Canada under an agreement. The commitments have been organized by category (for example, assistance, control measures, trade measures, co-operation, enforcement, reporting, etc.) to facilitate a search of the data base. In some cases, explanatory notes give additional details on particular aspects.

The data base is capable of presenting information on the measures taken to implement each commitment. This third level of information has not yet been completed and will require the collaboration of various federal departments involved in the implementation of the agreements.

How is it organized?

The agreements in the data base cover a wide range of topics, and differ in their scope and comprehensiveness. We developed a classification scheme to allow users to quickly and efficiently identify the agreements of interest to them. The classification system was based on similar catalogues prepared by the Consortium for International Earth Science Information Network and the Commission for Environmental Co-operation, and was then modified with input from Environment Canada and Foreign Affairs and International Trade. This scheme may be amended as the data base is expanded and the needs of users are identified more precisely. Any given agreement may fall under more than one heading; however, we expect that relatively few agreements will fall under many separate headings. For some headings, there are more detailed subheadings. For example, under the heading "air and atmosphere", there are subheadings for climate change, stratospheric ozone depletion, air pollution/air quality, and outer space. The list of agreements that will be in the data base as of 31 July 1998 and provided at the end of this Appendix illustrates the classification scheme.

How was it constructed?

Most of the data have been obtained through Foreign Affairs and International Trade, the United Nations Treaty Series, and other reputable sources. The descriptions of the commitments and the classification of the agreements into the relevant categories was based on the text of the agreements and their subject matter. Work on the data base has

been carried out by experts in international environmental law and by lawyers working with the Commissioner of the Environment and Sustainable Development. We have relied on the collaboration of Foreign Affairs and International Trade, Environment Canada and various other federal departments.

Despite careful quality control, we make or imply no representation that the information in the data base is complete and accurate. Users should refer to the disclaimer on our web site for details. Because the data base is intended to be a summary only, the original texts of the agreements should be consulted for more information.

How is it accessed?

The data base has been constructed for easy searching, sharing and updating of information. It is available in both English and French on the Internet, at the Auditor General's web site (http://www.oag-bvg.gc.ca). From this home page, users can proceed to the area for the Commissioner of the Environment and Sustainable Development. The data base is listed there with other publications and products. The data base contains links, where available, to sites that offer the full text of the various agreements.

How is it used?

Once the user enters the data base, there are several different display and search options to facilitate some of the common types of queries for information (for example, by classification of agreement or by date signed). Most of these are designed to help the user select the relevant agreement. There are buttons that allow easy access between the different levels in the data base (agreements, commitments, and eventually actions). For example, to display all of the commitments under a given agreement, the user simply clicks on the appropriate button.

This brief description does not constitute a full user manual, but rather is intended to indicate some of the capabilities of the system. The help functions accessible from the data base provide more assistance.

Why a data base?

As noted in the study, there is no centralized source of information on Canada's international environmental commitments. The data base compiles in one location information on the most important of Canada's international environmental obligations. The content of the data base is meant to be readily accessible to Canadians, so that they can easily be informed about the nature of the specific commitments Canada has made.

What are the plans for the future?

There are three directions for further development of the content of the data base. First, the remaining agreements and their commitments will need to be added to complete the set of agreements. Second, the relevant non-binding instruments will also need to be incorporated. Finally, implementation actions for each of the commitments should be included. We expect that the process of filling in the implementation actions will be a longer-term effort, given the need to co-ordinate information from various implementing departments.

Once the initial input of data on agreements is completed, responsibility for ongoing maintenance and completion of the data base will be transferred to Foreign Affairs and International Trade. This will include responsibility for annual updates to incorporate new agreements and instruments, and modifications to existing agreements and instruments.

Questions and comments

Readers who have questions or comments about the data base can follow the directions on the web site for the data base. Comments can also be sent directly to the Commissioner of the Environment and Sustainable Development.

List of agreements

The following annex shows the agreements that will be included in the data base as of 31 July 1998.

Annex

Commissioner of the Environment and Sustainable Development

List of International Environmental Agreements in the Data Base as of 31 July 1998

A. General Agreements

- North American Agreement on Environmental Co-operation

B. Preservation/Protection of the Natural Environment

1. Air & Atmosphere

a) Climate Change

- United Nations Framework Convention on Climate Change

b) Stratospheric Ozone Depletion

- Vienna Convention for the Protection of the Ozone Layer
- Montreal Protocol on Substances That Deplete the Ozone Layer (with London and Copenhagen amendments)

c) Air Pollution/Air Quality

- Convention on Long-Range Transboundary Air Pollution (LRTAP)
- Protocol to the LRTAP Convention on Long-Term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe
- Protocol to the LRTAP Convention Concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes
- Protocol to the LRTAP Convention on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by at Least 30 percent
- Protocol to the LRTAP Convention on Further Reductions of Sulphur Emissions
- Agreement between Canada and the United States on Air Quality

d) Outer Space

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies
- Convention on Liability for Damage Caused by Objects Launched into Outer Space
- Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Space

e) Other

- Agreement between Canada and the United States Relating to the Exchange of Information on Weather Modification Activities

2. Rivers and Lakes

a) Water Quality

- 1909 Boundary Waters Treaty
- Agreement between Canada and the United States on Great Lakes Water Quality, as amended in 1983 and 1987
- Treaty between Canada and the United States Relating to Co-operative Development of the Water Resources of the Columbia River Basin
- Treaty between Canada and the United States Relating to the Skagit River and Ross Lake, and the Seven Mile Reservoir on the Pend d'Oreille River
- Agreement between Canada and the United States for Water Supply and Flood Control in the Souris River Basin

b) Water Quantity

- 1909 Boundary Waters Treaty
- Agreement between Canada and the United States to Regulate the Level of Lake of the Woods
- Treaty between Canada and the United States Concerning Diversion of the Niagara River

Annex (cont'd)

- Treaty between Canada and the United States Relating to Co-operative Development of the Water Resources of the Columbia River Basin
- Treaty between Canada and the United States Relating to the Skagit River and Ross Lake, and the Seven Mile Reservoir on the Pend d'Oreille River
- Agreement between Canada and the United States for Water Supply and Flood Control in the Souris River Basin

3. **Oceans**

a) Water Quality

- International Convention for the Prevention of Pollution from Ships (MARPOL), 1973, as modified by the Protocol of 1978
- International Convention for the Prevention of the Pollution of the Sea by Oil, as amended
- Convention for the International Council for the Exploration of the Sea, as amended
- International Convention on Civil Liability for Oil Pollution Damage, as amended by 1976 Protocol
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, as amended by 1976 Protocol
- International Convention on Oil Pollution Preparedness, Response and Co-operation
- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, as amended
- Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea Bed and the Ocean Floor and in the Subsoil Thereof

4. **Soils**

- Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification, Particularly in Africa

5. **Flora**

- International Plant Protection Convention
- Convention on International Trade in Endangered Species of Wild Fauna and Flora, and amendments (CITES)
- International Convention for the Protection of New Varieties of Plants
- North American Agreement for Plant Protection
- International Tropical Timber Agreement

6. **Fauna**

- Convention on the Conservation of Antarctic Marine Living Resources
- Convention on International Trade in Endangered Species of Wild Fauna and Flora, and amendment (CITES)

a) Fish and Crustaceans

- Convention for the Conservation of Salmon in the North Atlantic Ocean
- International Convention for the Conservation of Atlantic Tunas, as amended by 1984 Protocol

b) Aquatic Mammals

- Convention for the Conservation of Antarctic Seals

c) Birds

- Convention for the Protection of Migratory Birds in Canada and the United States

d) Terrestrial Mammals

- Agreement on the Conservation of Polar Bears
- Agreement between Canada and the United States on the Conservation of the Porcupine Caribou Herd

e) Animal Habitat

- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR), as amended

Annex (cont'd)

7. **Protected/Designated Areas**
   - Convention for the Protection of the World Cultural and Natural Heritage

8. **Ecosystems**

   a) **Arctic/Antarctic Ecosystem**
   - Antarctic Treaty
   - Convention on the Conservation of Antarctic Marine Living Resources
   - Agreement between Canada and the United States on Arctic Co-operation
   - Agreement between Canada and the Russian Federation on Co-operation in the Arctic and the North

   b) **Marine/Aquatic Ecosystems**
   - Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR), as amended
   - Agreement between Canada and Denmark on Co-operation Relating to the Marine Environment, as amended

9. **Biodiversity (general)**
   - Convention on Biological Diversity

C. Monitoring/Controlling Human Activities That May Affect the Environment

1. **Management of Waste and Hazardous Substances**
   - Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal
   - Agreement between Canada and the United States Concerning the Transboundary Movement of Hazardous Waste, as amended

2. **Military and Conflict Issues**
   - Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea Bed and the Ocean Floor and in the Subsoil Thereof

Chapter 3

Responding to Climate Change — Time to Rethink Canada's Implementation Strategy

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants. The numbered paragraphs in bold face represent recommendations.

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Responding to Climate Change — Time to Rethink Canada's Implementation Strategy

Executive Summary

Overview

3.1 Climate change is perhaps the most daunting of a new generation of environmental problems that are testing governments around the world. It is a long-term problem that is inherently international in scope. Complex models based on a variety of assumptions are used to predict what the future climate will be and the resulting environmental and economic impacts, all of which involve some degree of uncertainty.

3.2 To a large extent, climate change involves questions about how energy is produced and consumed. Given that Canada is an energy-exporting country, and one with an economy heavily dependent on fossil fuel consumption, responding to climate change raises questions that go to the heart of how Canadians live and make their living. The economic dimension, coupled with the complexities and uncertainties of the science of climate change, provide ample room for vigorous debate about how Canada should respond to the threat of climate change.

3.3 Much of the domestic discussion around climate change has focussed on Canada's stabilization goal (stabilization of greenhouse gas emissions at 1990 levels by year 2000) established in 1990, and more recently on the *Kyoto Protocol* adopted in December 1997 by the Parties to the *United Nations Framework Convention on Climate Change*. If this Protocol is ratified by Canada and enters into force, Canada will be obligated to reduce emissions of certain greenhouse gases to six percent below 1990 levels in the commitment period 2008 to 2012.

Canada Has Agreed to Take Precautionary Action

3.4 Notwithstanding the scientific and economic uncertainties involved, almost all participants in the debate around the climate change issue accept that there are risks that have to be managed. In a federation such as Canada, the federal government cannot unilaterally respond fully to the risks and challenges of climate change. A high degree of co-operation is needed among all levels of government, with strong support from industry, non-governmental organizations and individual Canadians.

3.5 At the most general level, the federal government, along with the provinces and territories, has accepted that the threat of climate change poses significant risks to Canada. These risks have environmental, economic and social dimensions. The federal government has sought to work with Canadians and global partners to take precautionary action, both domestically and internationally, to manage these risks. In our view, using the precautionary principle as an overall strategy for responding to climate change is well suited to the problem.

3.6 Canada has taken a three-pronged approach to respond to climate change: mitigation — which essentially involves reducing emissions of greenhouse gases; adaptation — preparing to cope with

Responding to climate change raises questions of how Canadians live and make their living.

potential climate change; and improving the science of climate change to better understand the problems to be faced. This appears to be a sensible approach.

3.7 While all three components are important, this audit placed emphasis on the mitigation efforts directed at achieving Canada's stabilization goal. The other components are potential subjects for future audit.

3.8 To date, most of the debate in Canada has focussed on the pace and on the costs of action to reduce greenhouse gas emissions. Less effort has been directed toward taking advantage of the opportunities in responding to climate change and the admittedly more difficult question of the costs of not taking action.

3.9 **The federal government, in conjunction with other levels of government and major stakeholders, should increase its efforts to obtain a clearer understanding of the costs and benefits of inaction as well as the opportunities inherent in dealing with climate change, and should communicate these to Canadians** *(see paragraph 3.118).*

3.10 Work has been done in Canada on identifying various options that could be used to respond to climate change, but no agreement has been reached on a broad portfolio of measures designed to achieve Canada's stabilization goal. There needs to be a clearer understanding of the environmental, economic and social implications of these options.

3.11 **The federal government, in conjunction with other levels of government and major stakeholders, should develop a clearer understanding of the environmental, economic and social costs and benefits of possible measures to address climate change, as well as the distribution of these costs and benefits among regions, sectors and individuals** *(see paragraph 3.119).*

It is essential that the federal government apply the basics of good management in its leadership of the climate change issue.

Canada Is Not Expected to Stabilize Its Emissions at 1990 Levels

3.12 The National Action Program on Climate Change (NAPCC), approved in 1995, is the key program by which the federal, provincial and territorial ministers of energy and environment agreed to work together to achieve Canada's stabilization goal. Its implementation is failing to deliver on this long-standing goal.

3.13 In 1995, greenhouse gas emissions in Canada were about nine percent higher than in 1990. The federal government's April 1997 projection is that by the year 2000 these emissions will be about eight percent higher than 1990 levels.

3.14 Most other developed countries are forecasting that they will be unable to stabilize their greenhouse gas emissions at 1990 levels by the year 2000. In those few developed countries, such as Germany and the United Kingdom, that expect to meet the stabilization goal, good performance appears to be due, at least in part, to unique one-time circumstances that these countries have taken advantage of and reinforced in their national action programs and in their positioning on international climate change negotiations.

New Management Structure Required

3.15 It is essential that the federal government apply the basics of good management in its leadership of a subject as complex as the climate change issue, involving a wide array of interests and players. By this we mean, as a minimum, that:

- roles and responsibilities of those involved are clearly defined and agreed to;
- there is an overall plan for implementation, which sets concrete,

results-based targets and timetables for both the short and long term;

- there is a results-based monitoring system in place to assess progress;

- adjustments are made as required to achieve the targets; and

- summary-level information is tabled in Parliament to assist it in its oversight role.

3.16 As shown in the exhibit on page 3–8, many of the key elements necessary to manage the implementation of Canada's response to climate change are missing or incomplete. For example, the roles of the federal, provincial and territorial governments and other players in responding to climate change are poorly defined or not defined at all. A key component, a national public awareness program, has not been delivered. There is no implementation plan, limited provision for regular, results-based monitoring of progress and no consolidated summary-level reporting to Parliament.

3.17 Although we recognize the challenges involved, we believe that the failure to meet Canada's climate change commitments has been primarily the result of poor planning and ineffective management. At this time, there is no clear indication that continuing to follow Canada's current approach will produce any better results in meeting its present and any future climate change commitments. In our opinion, the steps taken by Canada to implement the strategic direction of the NAPCC need to be substantially rethought.

3.18 If Canada is to meet its commitments, the federal government's first priority in addressing climate change must be adequate strategic planning for implementation. In our view, the federal government needs to:

- assess the best way to organize itself to provide strong leadership;

- increase its efforts to develop a federal portfolio of measures to help meet Canada's climate change commitments;

- develop an open and transparent decision-making process that includes all levels of government and major stakeholders;

- develop a comprehensive consultation process that involves all levels of government, industry, non-governmental organizations and interested Canadians;

- determine who will take the lead in reporting performance results to Parliament; and

- develop a mechanism for making adjustments in the event that measures prove insufficient, or understanding of the science changes.

In addition, in its role as leader at the national level, the federal government needs to work with other levels of government and, where necessary, major stakeholders, to:

- clearly define roles and responsibilities of the different levels of government;

- establish accountability for actions and results;

- determine who is to be given the job of championing Canada's response to its climate change commitments;

- develop a national program for public awareness and education;

- establish a national implementation plan with interim targets;

- develop alternative measures to meet the target, assess the costs and benefits of each, and determine how the costs and benefits could be shared;

- obtain agreement on a broad national portfolio of measures designed to achieve climate change commitments; and

- determine the contributions to be made by federal, provincial and territorial governments.

The steps taken by Canada to implement the strategic direction of the National Action Program on Climate Change need to be substantially rethought.

3.19 The federal government, working with other levels of government and major stakeholders, should make a concerted effort to develop an effective management structure to respond to climate change *(see paragraph 3.93).*

3.20 The federal government should take the lead in making a concerted national effort, in conjunction with other levels of government and major stakeholders, to develop a formal, results-based implementation plan with performance expectations, including interim targets and a monitoring system, designed to achieve Canada's climate change commitments *(see paragraph 3.152).*

Shared Jurisdiction

3.21 Clearly, in a federation such as Canada, issues that involve different

Exhibit

Checklist Results – Key Elements in Managing Climate Change Commitments

Key element	Done	Some Progress	No Progress
Overall Strategy			
1. Risks associated with climate change recognized	✓		
2. National climate change goal established	✓		
3. Strategic direction established to meet the goal	✓		
Management Structure			
4. Roles and responsibilities agreed to by all levels of government		✓	
5. Leadership role of federal government clearly defined			✓
6. Roles and responsibilities for all federal players related to climate change specified		✓	
7. Establishment of clear contributions (expected of the various parties) designed to achieve the overall goal			✓
Public Awareness and Education			
8. National communication initiative for public awareness and education delivered			✓
Portfolio of Measures			
9. A broad portfolio of measures developed		✓	
10. Interjurisdictional agreement on measures designed to achieve the goal			✓
11. Costs and benefits of action and inaction analyzed		✓	
Monitoring Implementation			
12. National implementation plan developed			✓
13. Clear performance expectations established for individual actions		✓	
14. Implementation milestones and interim targets identified			✓
15. Actions undertaken to achieve the goal		✓	
16. Results-based information on performance made available to decision makers		✓	
17. Development of broad-based performance indicators to be used to measure progress		✓	
18. Performance monitored for results at regular intervals		✓	
Information to Parliament			
19. Summary-level reports tabled in Parliament			✓

levels of government working together create challenges. But these challenges are in no way unique to climate change. There are many areas in which federal and provincial governments have a shared interest in policy questions.

3.22 In 1995, a federal task force reported on its review of 16 case studies of federal-provincial co-operation in policy work. It found that success depended on a number of factors: building trust, which requires openness and careful attention to the interests of all parties; working within existing mechanisms of co-operation such as standing committees of officials; and developing a shared sense of the need to collaborate.

3.23 The current approach to federal, provincial and territorial co-operation in responding to climate change is not expected to produce the results that the federal government promised to Canadians over seven years ago. All levels of government need to plan and work together much more effectively to meet Canada's climate change commitments. The federal government has a key role to play in leading this national effort.

3.24 In issues such as climate change that involve reconciliation of a wide range of political and economic interests, it is clear that effective and sustained central co-ordination will be necessary. Mechanisms must be in place that involve decision makers at the highest level to resolve issues as they arise. Such processes necessarily require that the government's central co-ordinating agencies play a strong and continuing role.

3.25 The federal government should take the lead in working with the provinces and territories to set up a partnering arrangement, with written agreements on roles, responsibilities and contributions for meeting Canada's climate change commitments *(see paragraph 3.94).*

Joint response of Environment Canada and Natural Resources Canada: *In the 1992* United Nations Framework Convention on Climate Change, *Canada and other developed countries committed, amongst other things, to put in place policies and measures with the aim of returning their greenhouse gas emissions to 1990 levels by 2000. The* Framework Convention *and Canada's domestic commitment to stabilize greenhouse gas emissions at 1990 levels by 2000 set parameters for Canada's initial response to the issue of global climate change. To implement these commitments, the federal, provincial and territorial governments developed Canada's National Action Program on Climate Change (NAPCC) in 1995. This is a consensus document.*

The NAPCC was intended to be a living plan that pursues sectoral and broad-based opportunities through the appropriate development of actions and measures by governments and the private sector, while providing for periodic reviews of progress, and adjustments to the plan as required. While the NAPCC focussed on emission mitigation, it also called for action in the areas of science and adaptation. Federal, provincial and territorial governments have all engaged in developing plans to contribute to the NAPCC.

The federal government has developed an extensive federal portfolio of measures to help meet Canada's climate change commitments, including voluntary measures, regulations, research and development, and the provision of information to the public. NAPCC outlines a national portfolio of measures that cover all major sectors of the economy and focus on energy efficiency, promotion of and investment in renewable energy sources, and research and development in energy technology. By 2010, NAPCC initiatives are predicted to help reduce

greenhouse gas emissions by 66 megatonnes.

The NAPCC responded to the Framework Convention *and was the first iteration of Canada's plan to address climate change. It included principles to guide actions and decisions. The guiding principles include the precautionary principle, shared responsibility, effectiveness, competitiveness, transparency and accountability, flexibility and international co-operation.*

An independent review of NAPCC undertaken by consultants concluded, "NAPCC represents a balancing of competing policy goals and therefore political compromise to which all jurisdictions could agree. This compromise reflects differences in Canadian society over both the goal that Canada should pursue and the means it should apply to reach this goal." (Reviewing Progress Under NAPCC — Final Report, *November 19, 1996, page 8–1).*

At the first meeting of the Conference of the Parties to the Framework Convention *in 1995, the Parties agreed that the initial aim of the* Framework Convention *was inadequate. They agreed that new commitments for the post–2000 period should be concluded by the third Conference of the Parties in Kyoto in December 1997. At their fall 1996 meeting, federal and provincial energy and environment ministers acknowledged that Canada would not meet its domestic commitment to stabilize emissions at 1990 levels by 2000. Since then, the focus of much of the federal and provincial governments' efforts on climate change have been on the negotiation of new international commitments and their domestic implementation.*

The Kyoto Protocol *calls for Canada to reduce its emissions by 6 percent below 1990 levels for the period between 2008 and 2012. This is similar to the commitments of our major trading partners, including the United States. For all developed countries as a group, the* Kyoto Protocol *will result in an overall emissions reduction of 5.2 percent below 1990 levels.*

In addition to emission reduction commitments, the Kyoto Protocol *commits Parties to co-operate in scientific and technical research and promote the maintenance and the development of systematic observation systems, and development of data archives to reduce uncertainties related to the climate system, the adverse impacts of climate change, and the economic and social consequences of various response strategies.*

At their 11–12 December 1997 meeting, first ministers discussed the Kyoto Protocol *and they agreed that:*

- *climate change is an important global issue and that Canada must do its part to address it;*
- *we must do so in such a way that no region is asked to bear an unreasonable share of the burden;*
- *it is important to achieve a thorough understanding of the impact, the cost and the benefits of the Protocol's implementation and of the various implementation options open to Canada;*
- *a process must be established, in advance of Canada's ratification of the Protocol, that will examine the consequences of Kyoto and provide for full participation of the provincial and territorial governments with the federal government in any implementation and management of the Protocol; and*
- *federal, provincial and territorial ministers of the environment and energy work together to consider jointly the appropriate courses of action.*

Based on the conclusion of the Kyoto Protocol, *the charge from first ministers, and the need to advance Canada's response to the climate change issue,*

federal and provincial governments are building on the NAPCC to:

- *immediately engage governments and stakeholders to:*
  - *examine the impact, the cost and the benefits of the Protocol's implementation and of the various implementation options open to Canada;*
  - *prepare for the continuing international negotiations on rules to implement the* Kyoto Protocol*;*
  - *develop immediate actions consistent with the guiding principles that can be taken to provide early reductions in emissions (such as strengthening the Climate Change Voluntary Challenge and Registry Program); and*
  - *begin determining and developing longer-term actions that will provide sustained reductions in emissions;*
- *by the end of 1999, use the above deliverables to develop a phased, step-by-step national implementation strategy.*

The Minister of Natural Resources will take the lead in developing and co-ordinating Canada's domestic implementation strategy, while the Minister of the Environment will lead the development of Canada's international climate change agenda including Canada's position for the fourth meeting of the Conference of the Parties in Buenos Aires. The Minister of the Environment will continue to hold primary responsibility for the development of overall environmental policy in this area, including climate science, outreach and public education.

To assist in strengthening the management structure, a Federal Climate Change Secretariat was created in February 1998. Its mandate is to co-ordinate federal government actions and to work with provincial governments and industry to develop a national implementation strategy by the end of 1999, to address climate change commitments in the post–2000 period.

The roles and responsibilities of the various federal players are determined through the interdepartmental Core Assistant Deputy Ministers' Climate Change Committee, which was formed in June 1997 to co-ordinate the federal government's preparations for Kyoto and to manage the implementation of the Kyoto Protocol. *The Core Committee is chaired by the head of the Federal Climate Change Secretariat, and is used to develop federal consensus on key issues and strategies, and to co-ordinate the management of federal government responses. There are currently 11 government departments and agencies and the Federal Climate Change Secretariat represented on this Committee. This Committee reports to a Deputy Ministers' Committee on Climate Change, co-chaired by the Deputy Ministers of Environment and Natural Resources. Cabinet is reviewing progress on the issue on a regular basis.*

Recently, the federal government has announced that it will be taking a key role in co-ordinating the implementation of a national public awareness and education program on climate change and is now taking steps to establish a new national process to guide its development and implementation. Also, in its 1998 Budget, the Government of Canada committed $150 million over the next three years to build momentum toward concrete action and results on climate change. This initial allocation of funds will be used for early government actions to engage Canadians, public education initiatives to improve understanding of climate change, and research into the major challenges and opportunities for Canadian businesses, including sharing of best practices.

There are currently two House of Commons standing committees that are involved in examining the federal government's response to the climate change issue — the Committee on the Environment and Sustainable Development and the Committee on Natural Resources and Government Operations. Both committees have written a number of reports with recommendations on how to enhance the federal government's handling of environmental and resource-based issues, including climate change.

Introduction

The Basis for Global Concerns

International recognition of the risks

3.26 The Intergovernmental Panel on Climate Change (IPCC) was jointly established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to provide an authoritative, international, science-based assessment of the state of knowledge about climate change (see Appendix A for a brief description of climate change). The IPCC is responsible for developing consensus assessments of the available scientific and technical information, the causes of climate change and its environmental and socio-economic impacts. It is also tasked with formulating potential response strategies.

3.27 The IPCC has issued two major assessment reports. These reports involved the participation of many hundreds of specialists from around the world as contributing authors, as well as thousands of expert reviewers and reviews by governments. Canada has been actively involved in the process. The reports generally represent a broad international consensus on the issue of climate change.

3.28 In the IPCC's Second Assessment Report, issued in 1995, one of the key findings was that "the balance of evidence suggests that there is a discernible human influence on global climate". The IPCC has concluded that there is a buildup of greenhouse gases (mainly carbon dioxide) in the atmosphere. The IPCC believes that one of the contributors to the buildup of carbon dioxide is human activity such as burning fossil fuels and deforestation. The effect of the increase in the so-called greenhouse gases is to store heat that would otherwise escape the Earth's atmosphere. This could lead to climate change.

3.29 The Second Assessment Report concluded that failure to reduce greenhouse gas emissions could have potentially serious long-term impacts. These could include a rise in the mean or average annual global surface temperature, a change in weather and precipitation patterns, a change in crop yields and ecosystems, and a rise in sea levels, which could threaten coastal settlements. In addition, the report noted that climate change might have wide-ranging and serious impacts on human health. Such consequences transcend local and provincial boundaries and are becoming matters of national and, increasingly, international concern. The federal government has endorsed the findings of that report.

Climate change is truly a global problem that ultimately requires international action.

Many areas of uncertainty remain in the science

3.30 While much is known about the climate system, the IPCC recognizes that gaps still remain in the current level of understanding about the science of climate change. The current models contain weaknesses that add further uncertainty to their projections. Among the weaknesses are imperfect knowledge of probable future rates of human-made greenhouse gas emissions and how they will affect the global climate, and incomplete understanding of the complex climate process. The uncertainties include the response of clouds, water vapour, ice and ocean circulation to increased greenhouse gas emissions. There is also scientific debate about the extent, magnitude, timing, pace and regional distribution of climate change.

3.31 The uncertainties that lead to debate on whether climate change will have serious impacts cut both ways. The impacts could be less than predicted. They could also be worse. The fact that there are uncertainties does not make the problem go away.

Climate Change Poses a Significant Challenge for Canada

The effects of climate change are potentially serious

3.32 Reviews undertaken on behalf of federal, provincial and territorial ministers of energy and the environment have concluded that the effects of climate change on Canada are potentially serious. Every region and sector is expected to be affected, particularly agriculture, forestry and fisheries. Possible significant direct adverse effects could include changes in precipitation patterns leading to drier summers in the prairies and central Canada, an increase in forest fires and insect infestations, changes in migration patterns of fish stocks, coastal flooding from rising sea levels, extensive thawing of permafrost in the north and more frequent severe weather events. While many of the effects of climate change are expected to be negative, there are some potential positive effects in some parts of Canada, such as milder winters and a longer growing season.

Responses to matters that cross jurisdictional boundaries require that all levels of government integrate their efforts.

Responding to climate change is an area of shared jurisdiction

3.33 There is no explicit mention of the environment in the division of powers between the federal and provincial governments under the *Constitution Act, 1867*, although each level of government has powers that impact on it. As a result, jurisdiction in environmental matters is shared, as is responsibility for taking action and developing public policies to address climate change.

3.34 The federal government has jurisdiction over air pollution that crosses international boundaries. It addresses national concerns about the environment and negotiates, signs and ratifies international treaties on behalf of Canada. It also has its own policy instruments or levers, such as fiscal and regulatory tools and voluntary instruments.

3.35 The provinces have jurisdiction over their natural resources, including energy production and use and local emissions. They have various levers related to their powers of taxation and their ability to develop energy policies and regulations. They also have control over such matters as power generation, provincial building codes and provincial transportation, including inspection and maintenance of vehicles on the road.

3.36 Municipal governments have important levers related to their governance of the local infrastructure, including urban planning, transportation and building codes.

3.37 The federal government does not need the agreement of other levels of government to ratify international environmental commitments such as those related to climate change. However, federal government officials have informed us that the Canadian practice is for the federal government to ratify an international commitment only after it is assured that Canada can meet its obligations under that commitment. In Canada, development of cost-effective responses to environmental matters that cross jurisdictional boundaries requires that all levels of government integrate their efforts and involve industry, non-governmental organizations and individual Canadians. Federal government officials indicate that different government policy priorities, available resources and concerns about regional economic impacts of certain actions to reduce greenhouse gas emissions can constrain the integration of these efforts.

Responding to climate change poses a major sustainable development challenge

3.38 The federal government has stated that climate change is one of today's most important sustainable development issues, and one of the most significant environmental challenges facing present and future generations.

3.39 Climate change is not just an environmental issue. It also has aspects related to the economy, including trade and competitiveness considerations, as well as social aspects. In addition, it raises concerns about equity between generations, and among Canadian jurisdictions and sectors as well as nations and regions of the world. These considerations and competing interests have to be taken into account in deciding how to respond. Climate change thus epitomizes the challenge of sustainable development.

3.40 Responding to climate change will require effort over a long period of time. As has been stated, the challenge is not to find the best policy today for dealing with climate change over the next century but rather to select a prudent strategy, begin moving in the right direction and adjust the strategy over time in the light of new information.

Canada's Response to the Challenge of Climate Change

The federal government has endorsed the precautionary principle

3.41 The scientific uncertainties about climate change are expected to continue for some time. Policy makers are therefore faced with the dilemma of having to make difficult decisions about climate change without the luxury of waiting until the science is firm enough to be thoroughly convincing.

3.42 Given the scientific uncertainty, the Intergovernmental Panel on Climate Change (IPCC) and others have suggested that efforts to address climate change should be guided by the precautionary principle. They generally interpret this principle to mean that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

3.43 Despite the remaining uncertainties, the federal government has concluded that the science of climate change is sufficient to justify taking precautionary measures: the threat is real and the potential environmental, economic and human costs are simply too high to not take immediate action. In our view, using the precautionary principle as an overall strategy for responding to climate change is well suited to the problem.

Canada has committed itself to a three-pronged approach

3.44 Canada's response has taken a three-pronged approach. This includes acting to mitigate or reduce greenhouse gas emissions, improving scientific understanding of the issue, and taking action to adapt to potential climate change. This appears to be a sensible approach.

3.45 The federal government has concluded that for informed decision making on future policy options, it is important to continue working on the science to better understand the climate system and to detect changes in it, and to better understand the potential socio-economic and environmental impacts on Canada.

3.46 Most greenhouse gases remain in the atmosphere for decades to centuries. Immediate reductions in emissions will likely be overshadowed initially by greenhouse gases already in the atmosphere. Many scientists believe that it may take several decades before the effects of the reductions are noticeable, just as it took years to recognize the impact of incremental growth in greenhouse gas emissions. Even if immediate stabilization in emissions of greenhouse gases were achieved, the concentrations of these gases in the atmosphere will continue to increase for many years. Canada's position is that even with national and international mitigation measures, some degree of climate change is inevitable. Thus, Canada recognizes the

The federal government has concluded that the potential costs are too high to not take immediate action.

need for a national adaptation strategy, designed to respond to projected or actual changes, such as increases in severe weather events and changes in water levels.

In 1992, Canada made an international commitment to reduce its greenhouse gas emissions

3.47 The atmosphere knows no boundaries and the issue of climate change is truly a global problem that ultimately requires international action. Over 150 countries signed the *United Nations Framework Convention on Climate Change* (FCCC) at the Earth Summit in June 1992. In December 1992, Canada became one of the first countries to ratify its signature to the Convention.

Canada's domestic policy commitment is to stabilize greenhouse gas emissions at 1990 levels by the year 2000.

3.48 The interim objective of the FCCC called on Annex I Parties, primarily the developed and Eastern European countries, to *aim* to reduce their greenhouse gas emissions to 1990 levels by the year 2000. The ultimate objective, however, is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system. The FCCC states that such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. The Parties to the FCCC agreed to hold a series of follow-up meetings, referred to as the Conferences of the Parties, to assess their progress toward the objectives set forth in the Convention.

3.49 While the FCCC does not include legally binding targets and schedules to control greenhouse gas emissions, it does require Annex I Parties to undertake a number of actions within a range of options. The FCCC commits Canada and other countries to, among other things, implement policies and measures to mitigate climate change; adopt policies and measures to facilitate adaptation to climate change; promote and co-operate in the exchange of information related to climate change; and develop and implement educational and public awareness programs on climate change. These commitments are to take into account the specific national and regional priorities of the countries. These undertakings collectively represent Canada's international commitment to respond to climate change.

Canada also has a long-standing domestic policy commitment

3.50 Canada's domestic policy commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000, commonly referred to as Canada's stabilization goal, was first made at the May 1990 United Nations conference in Bergen, Norway. It was reaffirmed at the November 1990 Second World Climate Conference in Geneva, Switzerland. In December 1990, *Canada's Green Plan for a healthy environment* also reported Canada's commitment to the stabilization goal, which is a national goal without specific regional, sectoral or industrial targets.

3.51 As Canada's response to the FCCC, the National Action Program on Climate Change (NAPCC) was approved by federal, provincial and territorial ministers of energy and the environment in February 1995. The NAPCC reaffirmed the endorsement of the precautionary principle and the commitment to Canada's stabilization goal.

3.52 Thus, for over seven years Canada has had a domestic policy commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000. This domestic commitment is tougher than the interim objective of the FCCC, which is only to *aim* to stabilize.

In 1997, the *Kyoto Protocol* was adopted

3.53 In December 1997, the Third Conference of the Parties to the FCCC held in Kyoto, Japan, adopted the *Kyoto Protocol*, which, once in force, will impose legally binding greenhouse gas emission reduction obligations on the Annex I Parties. These include a commitment by Canada to reduce emissions of certain greenhouse gases to six percent below 1990 levels in the commitment period 2008 to 2012. However, this Protocol was opened for signature only on 16 March 1998. At the time of our audit, Canada had not yet signed this Protocol.

Canada Is Not Expected to Meet Its Stabilization Goal

Canada's greenhouse gas emissions continue to grow

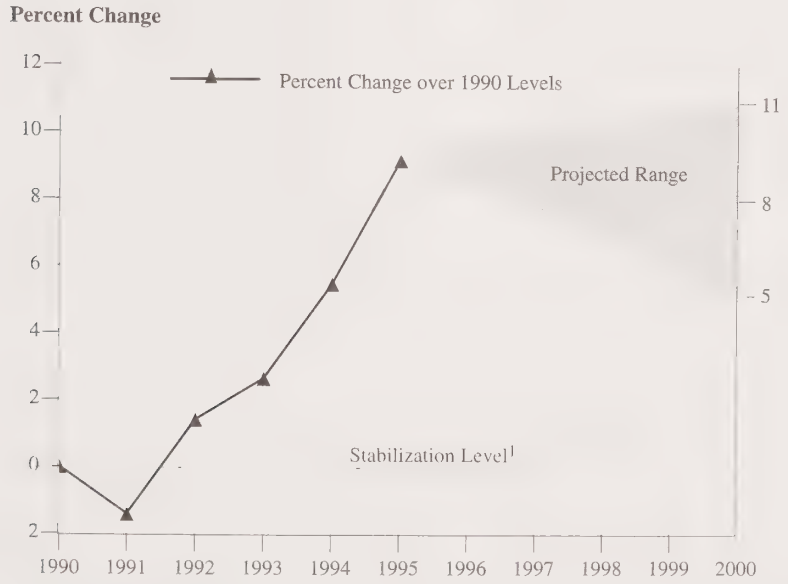
3.54 With less than one percent of the world's population, Canada contributes about two percent of net global greenhouse gas emissions that result from human activity. Canada is one of the highest emitters of greenhouse gas emissions per capita in the world. The federal government believes there are several factors that contribute to this, most of which are related to Canada's production and consumption of energy. They include Canada's large geographic area, long transportation distances, cold climate, energy-intensive resource-based industries and energy exports.

3.55 Environment Canada reports that total Canadian greenhouse gas emissions in carbon dioxide equivalents, the common unit of measurement, were 567 megatonnes in 1990 (one megatonne of carbon dioxide emissions is equivalent to the annual carbon dioxide emissions of about 200,000 cars). In 1995 (the latest year for which data are available), total Canadian greenhouse gas emissions were reported to be about 9 percent higher than in 1990. Exhibit 3.1 shows the upward trend.

3.56 The federal government attributes the sustained growth in emissions largely to population growth, increased energy consumption and an increase in economic activity, particularly oil and natural gas

Exhibit 3.1

Trend in Canada's Greenhouse Gas Emissions Since 1990



[1] The stabilization level is 567 megatonnes of greenhouse gas emissions in carbon dioxide equivalents.

Sources: Trends in Canada's Greenhouse Gas Emissions: 1990–1995 and Canada's Energy Outlook: 1996–2020

production and exports. Mitigation efforts, including Canada's improved energy efficiency, have helped to reduce the rate of increase in greenhouse gas emissions but have not been sufficient to halt their growth overall.

3.57 Under the *United Nations Framework Convention on Climate Change*, all Annex I Parties are required to report annually on their inventories of greenhouse gas emissions resulting from human activities. Using the most recent reports available, we compared Canada's progress between 1990 and 1995 with that of seven other industrialized countries.

3.58 Greenhouse gas emissions have grown more slowly in Canada than in the Netherlands but more rapidly than in six of the countries: Australia, Germany, Japan, Norway, the United Kingdom and the United States. In Germany and the United Kingdom, emissions actually fell in the same time period. This appears to be due, at least in part, to unique one-time circumstances that those countries have taken advantage of and reinforced in their national action programs and in their positioning on international climate change negotiations. In the case of Germany, the unique circumstance relates to the industrial restructuring of East Germany. For the United Kingdom, it relates to the switch from coal to natural gas as a result of the liberalization of energy markets.

Natural Resources Canada now estimates that greenhouse gas emissions could increase to about 11 percent above 1990 levels in the year 2000.

The federal government projects a significant gap by the year 2000

3.59 When the National Action Program on Climate Change (NAPCC) was approved in 1995, it included a projection that total greenhouse gas emissions for Canada could be 13 percent higher in the year 2000 than in 1990. Natural Resources Canada (NRCan) periodically updates this projection in its Energy Outlook report. The difference between the projected or actual level of greenhouse gas emissions and the 1990 level is known as the "gap".

3.60 In its April 1997 report, Canada's Energy Outlook: 1996–2020, NRCan projected that the gap would be narrowed to eight percent above 1990 levels in the year 2000, although it indicates that the projected range could be from 5 to 11 percent (Exhibit 3.1). Canada's Second National Report on Climate Change — Actions to Meet Commitments under the *United Nations Framework Convention on Climate Change* (May 1997) indicated that progress in lowering the gap is being made as a result of the impact of the NAPCC response strategies and other forecasting assumptions. This national report also noted that most other developed countries were, like Canada, forecasting that they would not stabilize their greenhouse gas emissions at 1990 levels by 2000.

3.61 Since the April 1997 projection was made, a development occurred that could have a further significant impact on Canada's ability to meet its stabilization goal. In August 1997, Ontario Hydro announced that it would be temporarily laying up some of its nuclear generating capacity and replacing it with fossil fuel generation. If this proposed shift to fossil fuels occurs, it will temporarily increase the amount of greenhouse gases emitted by Ontario Hydro when compared with the projections included in the report, Canada's Energy Outlook: 1996–2020. Based on this temporary increase in fossil fuel generation, NRCan estimates that Canada's greenhouse gas emissions could increase to about 11 percent above 1990 levels in 2000. Ontario Hydro, however, has informed us that it is committed to stabilizing its net greenhouse gas emissions at 1990 levels by the year 2000 and plans to honor this commitment even during the period of reduced nuclear generation.

Focus of the Audit

3.62 Addressing the global problem of climate change requires global initiatives and agreements such as the *United Nations Framework Convention on Climate Change*. Canada has recognized the importance of taking domestic action to reduce its own greenhouse gas emissions as part of its contribution to international efforts.

3.63 This audit focussed on Canada's current domestic policy commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000 and on the federal government's role in implementing Canada's National Action Program on Climate Change. The NAPCC sets strategic directions in pursuit of the stabilization goal and provides guidance for actions beyond 2000. Our audit placed emphasis on mitigation efforts directed at achieving Canada's stabilization goal.

3.64 The overall objective of this audit was to assess the adequacy of the federal government's management of the implementation of Canada's domestic policy commitment on climate change. To do so, we examined what we consider to be key elements in managing climate change commitments. The exhibit in the **Executive Summary** provides a checklist of these key elements and provides our assessment of progress. The **Observations and Recommendations** section provides our detailed observations in the same order as the checklist.

3.65 If, as the federal government predicts, Canada does not have a reasonable chance of meeting its stabilization goal, we wanted to find out some of the reasons why. This could identify lessons to be learned from the perspective of management for achieving future targets.

3.66 We examined the federal role associated with translating the strategic direction of the NAPCC into explicit and concrete actions to enable Canada to reach its stabilization goal. We also examined the related information provided to Parliament. Given the domestic and federal focus of our audit, our work involved mainly the federal environment and energy departments, Environment Canada and Natural Resources Canada (NRCan), although we recognize that aspects of climate change concern all federal departments, agencies and other federal entities and are therefore sectoral in nature.

3.67 Our audit work took into consideration the three key themes that the first report of the Commissioner of the Environment and Sustainable Development described as weaknesses in the federal government's management of environmental and sustainable development issues. Those themes are:

- the implementation gap, that is, the gap between stated objectives and actual performance;
- a lack of co-ordination and integration among federal entities and across jurisdictions; and
- inadequate performance review and information to Parliament.

3.68 Further details on our audit objective, scope and methodology can be found at the end of the chapter in the section **About the Audit**.

This audit focussed on the federal government's role in implementing Canada's National Action Program on Climate Change.

Observations and Recommendations

An Overall Strategy Has Been Established

3.69 As discussed previously, Canada has recognized the potential risks associated with climate change and has established a national goal, as well as strategic direction to meet this goal

through the National Action Program on Climate Change (NAPCC).

Key element:

1 Risks associated with climate change recognized — **Done**

2 National climate change goal established — **Done**

3 Strategic direction established to meet the goal — **Done**

Management Structure Lacks Accountability

There are no clear and transparent agreements between governments that specifically define their respective roles and responsibilities in achieving the stabilization goal.

3.70 The federal government's view is that addressing climate change is the shared responsibility of all Canadian governments, industries, non-governmental organizations and individuals. Responsibility at the federal level is divided among departments, agencies and other entities. We would expect that where jurisdiction is shared, there is a need for understanding and agreement on roles and responsibilities, a co-ordinated effort, and clear accountability reporting that spells out respective authorities and responsibilities for actions, as well as for results achieved.

3.71 The federal, provincial and territorial governments have long acknowledged the importance of accountability arrangements when working in partnership to deal with environmental matters. For example, the National Action Strategy on Global Warming, released in November 1990, proposed that a strategic framework for actions be undertaken jointly by governments and all other sectors of the economy to combat global warming (one aspect of climate change). It also stated that the principles and elements of the national action strategy should be codified in federal-provincial agreements.

3.72 The NAPCC identifies a number of principles to guide the selection of measures for dealing with climate change. The transparency and accountability principle states, "Clear accountability should be established regarding who will be responsible for taking action, what actions are being taken, the expected impact of these measures, and how well the measures actually performed."

Respective roles and responsibilities of all levels of government are not clear

3.73 The federal government's position is that all levels of government must work in partnership to address climate change, including the use of collaborative arrangements in which participants agree to work together to achieve a specific objective. Given the critical importance of clear accountability arrangements in multi-jurisdictional programs, we expected to find documentation on the roles and responsibilities of all levels of government for achieving Canada's stabilization goal.

3.74 We found that while the NAPCC provides strategic direction for Canada's action on climate change, it does not define the specific roles and responsibilities of the various jurisdictions or parties to it. Federal government officials have informed us that, as a national consensus document, the NAPCC provides a guide for actions that the different levels of government may choose to implement according to their jurisdictional responsibilities and resource capabilities. These officials also informed us that the federal, provincial and territorial ministers of energy and environment have overall joint responsibility for meeting the stabilization goal through the federal-provincial/territorial co-ordinating framework and the related national co-ordinating mechanism (described in Appendix B).

3.75 We recognize that there are various agreements between the federal government and the provinces to promote co-operation in voluntary initiatives and research and development, which support Canada's response to climate change. However, there are no clear and

transparent agreements or arrangements between the federal government and the provinces and territories that specifically define their respective roles and responsibilities in achieving the stabilization goal.

3.76 We noted that although municipalities hold some important policy levers, they are under the jurisdiction of the provinces and therefore are not included in the current national co-ordinating mechanism, except as stakeholders.

3.77 In summary, despite the long-standing acknowledgment of the importance of accountability arrangements to deal with environmental matters, the respective roles and responsibilities of all levels of government for dealing with climate change have not yet been clarified and agreed to.

Key element:
4 Roles and responsibilities agreed to by all levels of government — **Some progress**

Federal roles and responsibilities have not been made clear

3.78 Under the NAPCC, the federal government indicated that it is committed to strong leadership to ensure that Canada stays on track to meet its climate change commitments. It has also indicated in other documents that it will take responsibility for providing leadership at the national level. Apart from its intention to lead by example in its own operations, it has chosen to exercise its leadership role primarily by creating suitable conditions for others to take action and then participating in co-ordinating actions where appropriate.

3.79 Two federal departments are co-leading, but their leadership role is unclear. Environment Canada and Natural Resources Canada (NRCan) have many activities under their own mandates that support Canada's domestic and international response to climate change by helping to reduce greenhouse gas emissions, improving scientific understanding of the issue, and adapting to potential climate change (see Appendices C and D). Several of these activities provide elements of national leadership.

3.80 These two departments have publicly stated that they have taken the lead domestically on the climate change issue. Departmental officials also indicated to us that they are jointly responsible for leading the federal government's actions to implement the NAPCC, including establishing joint federal, provincial and territorial mechanisms, encouraging the involvement of the many players and engaging all Canadians to take action. However, the two departments have limited authority and capability to ensure that action is taken in other federal entities, in other jurisdictions, in industry, in non-governmental organizations, or by individuals.

3.81 In general, Environment Canada holds primary responsibility for the development of overall environmental policy on climate change, including climate science and public education. NRCan is more involved in developing and co-ordinating Canada's domestic implementation strategy, including dealing with the industrial sectors. The two departments also share responsibility for developing new policy options and measures to deal with climate change, and for leading the federal government's efforts to reduce its own greenhouse gas emissions. Therefore, in our view, these two federal departments share responsibility for championing or co-leading Canada's response to climate change.

3.82 However, in reviewing departmental documents submitted to Parliament by Environment Canada and NRCan, we found that they were silent on the exact nature of their co-leadership role

We were unable to find any documentation providing a substantive definition of the federal government's leadership role.

and their responsibilities for implementing the NAPCC. For example, the Reports on Plans and Priorities (formerly Part III of the Estimates), Performance Reports and Sustainable Development Strategies for both departments describe their roles and responsibilities for climate change issues as they relate specifically to their own departmental mandates.

3.83 Roles and responsibilities of other federal players are not specified. We would expect the federal government to assign roles and responsibilities to the various federal players and to be able to tell Parliament who in the federal government is accountable for federal actions supporting the implementation of the NAPCC. To determine roles and responsibilities, we examined the interdepartmental co-ordinating mechanisms and agreements related to climate change.

3.84 In addition to Environment Canada and NRCan, many other federal departments and agencies have roles and activities under their own mandates that support Canada's response to climate change. These include Agriculture and Agri-Food Canada, the Canadian International Development Agency (CIDA), Department of Finance, Department of Fisheries and Oceans, Department of Foreign Affairs and International Trade, Health Canada, Industry Canada, the Privy Council Office, Public Works and Government Services Canada, Transport Canada, and the Treasury Board Secretariat. All federal entities also have a responsibility to make a contribution to implementing the NAPCC by reducing greenhouse gas emissions in their own operations. Therefore, the federal and national response to climate change requires co-ordination at the federal level.

3.85 In January 1995, the four federal resource departments — Agriculture and Agri-Food, Environment, Fisheries and Oceans and Natural Resources — signed a three-year Memorandum of Understanding (MOU). The MOU's purpose is to help the departments increase co-ordination, work together on joint projects and implement a framework for sustainable development science and technology in the natural resource sectors. Climate change is identified as a priority issue for collaboration and research. The MOU calls for finding the best ways for the four departments, individually and together, to address scientific uncertainties and communicate the significance of climate change to Canadians. The climate change and variability component of this MOU covers climate science and, to an increasing degree, impacts and adaptation. The latter were added to the mandate of the MOU in the fall of 1997. An extension to this MOU was being negotiated at the time of our audit.

3.86 In addition, the interdepartmental Program of Energy Research and Development (PERD) helps 12 federal departments to co-ordinate their energy research and development, including the areas of energy efficiency, renewable energy and technologies to reduce greenhouse gas emissions. Since April 1996, PERD has increased its support to the climate change issue.

3.87 An Interdepartmental Core Assistant Deputy Ministers Committee, established in June 1997, serves as the main mechanism of federal co-ordination for the climate change issue in connection with the federal government's preparation for Kyoto and to manage the implementation of the *Kyoto Protocol*. The Committee currently comprises representatives from 10 departments and agencies — Agriculture and Agri-Food, CIDA, Environment, Finance, Foreign Affairs and International Trade, Industry, Natural Resources, the Privy Council Office, Transport, and Treasury Board Secretariat. This Core Committee, co-chaired by Environment Canada and NRCan, is used to develop federal consensus on key issues and strategies

related to climate change and to co-ordinate the management of the federal activities. However, it has no documented terms of reference.

3.88 In summary, we were unable to find any documentation providing a substantive definition of the nature of the federal government's leadership role in relation to climate change. Neither the interdepartmental co-ordinating mechanisms nor agreements have helped to clarify federal roles and responsibilities in implementing the NAPCC, including requirements for reporting to Parliament on the climate change sectoral activity. Federal departmental officials were unable to provide us with any other relevant documentation. In our opinion, the federal government has failed to devise an acceptable means by which it can be held accountable for its leadership of the climate change issue, and for federal participation in implementing the NAPCC.

Key element:
5 Leadership role of federal government clearly defined — **No progress**
6 Roles and responsibilities for all federal players related to climate change specified — **Some progress**

Improvements in accountability are required

3.89 The federal, provincial and territorial governments agreed to the NAPCC as Canada's response to the *United Nations Framework Convention on Climate Change*, and agreed to use the current national framework to co-ordinate their "partnership" efforts in addressing climate change. Under the NAPCC, accountability for actions and results is spread among many players. The success of a partnership or partnering arrangement requires a willingness to accept specific roles and responsibilities at the outset to avoid misunderstandings and to establish accountability for taking action and achieving results.

3.90 Because specific roles and responsibilities of the various players in the NAPCC have not been established, we were unable to determine their individual contribution to achieving Canada's stabilization goal or the true nature of the federal, provincial and territorial relationship involved. In our opinion, no true partnership has been set up between the various levels of government to reach Canada's stabilization goal.

3.91 We believe that undefined and diffused accountability erodes the authority and responsibility of the federal, provincial and territorial governments and their officials and makes it difficult for anyone to measure their respective performance. It also means that accountability for Canada's progress toward its stabilization goal is obscured. Nevertheless, in our opinion the federal government remains accountable to Parliament for establishing an effective management structure to respond to climate change.

Key element:
7 Establishment of clear contributions (expected of the various parties) designed to achieve the overall goal — **No progress**

3.92 The federal government should clarify its roles and responsibilities for achieving Canada's climate change commitments, including its leadership role and the roles and responsibilities of the various federal players.

3.93 The federal government, working with other levels of government and major stakeholders, should make a concerted effort to develop an effective management structure to respond to climate change.

3.94 The federal government should take the lead in working with the provinces and territories to set up a

Accountability for Canada's progress toward its stabilization goal is obscured.

partnering arrangement, with written agreements on roles, responsibilities and contributions for meeting Canada's climate change commitments.

Public Awareness and Education Program Required

Developing public opinion is critical.

3.95 Given the importance placed by the federal government on involving all Canadians in addressing climate change, we would expect it, as national leader, to co-ordinate the development of a national public awareness and education program on climate change.

There is a long-standing recognition of the need for public awareness and education

3.96 For over seven years, the federal government has identified the need for a national public awareness and education campaign on climate change (Exhibit 3.2).

A public awareness and education program is necessary for many reasons

3.97 As stated in the 1990 Green Plan, an informed public is considered essential in responding to climate change. Actions by individual Canadians are part of the problem and are a necessary part of the solution. In 1995 the NAPCC noted the need for a national communication program, because developing public opinion is critical if Canadians are to take actions individually and to work in partnership with government.

3.98 Canada's Second National Report on Climate Change (1997) noted that surveys consistently show a lack of awareness about what individuals can do to help reduce the levels of greenhouse

Exhibit 3.2

Extracts from Government Documents Related to Public Awareness and Education on Climate Change

Source	Extract
November 1990 — National Action Strategy on Global Warming	• It is proposed that governments launch initiatives to educate and inform Canadians of the nature of the global warming problem, their role in the problem, and how they can help resolve it.
December 1990 — Canada's Green Plan	Limiting greenhouse gases by informing and challenging Canadians: • The Government of Canada will launch a major public information campaign, beginning in 1991, in order to stress the importance of individual action and to put Canadians in a position to make more informed decisions.
1992 — The *United Nations Framework Convention on Climate Change* (signed and ratified by Canada)	Education, Training and Public Awareness: • Article 6(a) states, among other things, that Parties shall promote and facilitate, at the national level, the development and implementation of educational and public awareness programs on climate change and its effects.
February 1995 — Canada's National Action Program on Climate Change	A National Communication Program: • An action-oriented public education campaign on climate change, co-ordinated with other air issues where appropriate, will be developed for Canadians.
December 1996 — Government of Canada press release following a Joint Ministers Meeting	National Climate Change Outreach Initiatives: • Using an alliance-building approach, Environment Canada will involve a broad range of educators, governments at all levels, businesses, environmental groups and others in reaching out to Canadians about climate change.
April 1997 — Environment Canada's Sustainable Development Strategy	• The department plans, among other things, to commence a national education and outreach initiative.

gas emissions produced by Canada. We also found in interviews with a wide variety of stakeholders that virtually all of them strongly agree on the need to increase public awareness and education.

3.99 Government documents and our interviews with stakeholders identified several reasons why a public awareness and education program is needed. These include the need to:

- inform Canadians about Canada's international and domestic commitments related to climate change;
- explain Canada's national program for responding to climate change;
- recognize and understand legitimate, but different, points of view and present them in a fair and balanced manner;
- clarify what the science says or does not say;
- help in understanding the potential impacts and costs of inaction;
- explore the costs and benefits of different mitigation and adaptation measures, including their socio-economic impacts;
- help exploit opportunities presented by climate change;
- understand the links between various activities and greenhouse gas emissions;
- prepare the groundwork for successful stakeholder consultations on new measures;
- promote public acceptance of new measures and policies;
- explore what members of the public can do on their own; and
- promote behavioural and lifestyle changes.

Specific roles and responsibilities are not assigned

3.100 Although the NAPCC identified the need for a national communication program, it did not define what the specific components of such a program would be. We found that they are still undefined. In addition, specific roles and responsibilities have not been assigned for developing and implementing such a program, including leading and co-ordinating it.

Individual actions have been undertaken or proposed

3.101 The 1996 federal-provincial-territorial review of the NAPCC and Canada's Second National Report on Climate Change (1997) both noted that there are many activities in Canada that make information available to the public or raise awareness about climate change. Canada's Second National Report also identified a number of related efforts initiated by all levels of government and by some non-governmental organizations.

3.102 In addition to those efforts, we noted that a number of other initiatives have been proposed. For example:

- In early December 1997, the Government of Canada announced an Environment Canada initiative to build on its current public information, environmental citizenship and community action initiatives to make available to Canadians up-to-date and credible information on climate change. This announcement also recognized NRCan's energy efficiency and alternative energy initiatives as a practical means of reducing greenhouse gas emissions. In addition, the announcement indicated that co-operative efforts with other federal departments, interested provincial governments, educators, non-governmental organizations and the private sector would be developed. However, departmental officials have informed us that these initiatives are not formally linked to a national communication program.

- The National Air Issues Co-ordinating Committee, which forms part of the national co-ordinating mechanism described in Appendix B, has identified as one of its long-term priorities to educate the public and increase public awareness of the need for action on air issues. In late 1993 it established a Public Education Task Group. This Task Group plans to develop an inventory of existing public education efforts and products in all jurisdictions on various air issues, including climate change. This work is scheduled to be completed by the end of March 1998.

- The National Round Table on the Environment and the Economy (NRTEE) established a National Forum on Climate Change in early 1998. A panel of 26 citizens chosen from among recipients of the Order of Canada or the Meritorious Service Decoration will hear from climate change experts and stakeholders. The NRTEE has indicated that one of the outputs of the Forum will be a declaration that will assist Canadians by providing an objective and unbiased statement of the climate change challenge.

A national public awareness and education program has been promised but not launched

3.103 The 1996 review of the NAPCC stated that the numerous information programs in place are not considered an adequate substitute for a national communication program. It also confirmed that a national program had not been launched. In addition, it stated that the current information programs are designed to support specific actions rather than to raise awareness in general.

3.104 Canada's Second National Report (1997) identified several individual initiatives and stated that they are in keeping with Canada's commitment to develop a national communication program on climate change. However, despite the many individual efforts to inform and educate the public, we found that to date there has been inadequate national leadership and co-ordination of these efforts. Over the last seven years Canada has, in our opinion, lost an opportunity to increase public awareness and education on climate change, to prepare the public for a national debate on policy options and to ensure that Canadians support policies designed to meet the challenges presented by climate change.

Key element:

8 National communication initiative for public awareness and education delivered — **No progress**

3.105 In keeping with Canada's commitment to develop a national public awareness and education program on climate change, the federal government should take the lead role in developing this program, seeking the co-operation of other levels of government and major stakeholders.

3.106 The federal government should then take a key role in co-ordinating the implementation of a national public awareness and education program on climate change, in conjunction with other levels of government and major stakeholders where necessary.

A Broad Portfolio of Measures Is Required

No agreement has been reached on a broad portfolio of measures designed to achieve Canada's stabilization goal.

The current approach is insufficient to achieve Canada's stabilization goal

3.107 The federal government employs a limited number of policy measures. The federal government has an extensive range of policy instruments within its own jurisdiction that it could use to meet its policy objectives. These include voluntary measures, information programs, research and development, regulations, taxes, charges, subsidies and incentives. Within these instruments, the federal government as well as provincial

and territorial governments have concluded that a broad portfolio of measures will be required to respond to climate change.

3.108 However, at this time the federal government has ruled out one of the many possible types of taxation—a carbon tax on fossil fuels—as a means of reducing greenhouse gas emissions. To date, it has chosen to employ only a limited number of policy measures and has favoured voluntary approaches. Also, given recent fiscal restraints, fewer resources have been available for major grant and contribution programs. In addition, in recent times the government has generally been reluctant to make extensive use of regulations as a major policy tool.

3.109 Efforts to develop new measures to meet Canada's stabilization goal have, for the most part, been based on consensus among all levels of government. Mechanisms have been set up between the federal government and the provincial and territorial governments (see Appendix B), and within the federal government, to co-ordinate national action on climate change and to develop new options to meet the current commitment. Various consultation mechanisms have also been set up over time to involve municipalities and other stakeholders in the decision-making process and to help identify solutions.

3.110 There is a long-recognized need to develop new options. As illustrated in Exhibit 3.3, the federal government has long recognized the need to develop new options and measures to meet the stabilization goal.

3.111 Since 1993, the federal, provincial and territorial ministers of energy and the environment, at their annual Joint Ministers Meeting, have repeatedly called for their officials to develop new options and measures to meet the stabilization goal. Moreover, these ministers agreed in November 1997 that Canada's response to climate change needs to be based on a clear understanding of the implications of any package of measures—their environmental and economic impacts, costs and benefits.

3.112 Work has been done in Canada on identifying various options that could be used to respond to climate change. Different economic models have been used to examine the effects of implementing some of these. These models forecast the potential costs of some of these options, with a wide range of results. While providing an important source of information, these models are only one input into the selection of options.

3.113 In summary, notwithstanding the federal-provincial/territorial co-ordinating framework and the work done on various options, no agreement has been reached on a broad portfolio of measures designed to achieve Canada's stabilization goal. The challenge is not to find the best set of measures today that will deal with climate change over the next century. Rather, it is to select a prudent strategy supported by a broad portfolio of measures, begin moving in the right direction and adjust the strategy and measures over time in the light of new information. The federal position is that the policy measures currently employed to address climate change will not achieve Canada's stabilization goal on their own; that is, the current approach with its heavy emphasis on voluntary measures is not sufficient to deal with the problem.

Key element:

9 A broad portfolio of measures developed — **Some progress**

10 Interjurisdictional agreement on measures designed to achieve the goal — **No progress**

Cost and benefit analyses need to be developed

3.114 Making decisions about climate change requires balancing the interests of

both the producers and the consumers of energy, as well as weighing the costs and benefits of precautionary action against the costs and benefits of inaction. The federal government has concluded that measures to address climate change present opportunities for Canada, such as enhancing competitiveness in areas like environmentally friendly technologies.

3.115 The current federal position is that all Canadians will incur costs to respond to climate change but they will also incur costs if Canada and the global community do not take action. The NAPCC recognized the need to comprehensively assess the costs—the environmental, economic and social consequences—of not taking action to address climate change. Yet a 1996 review of the NAPCC reported that little or no work was under way in Canada to assess the economic implications of inaction.

3.116 In our opinion, governments need additional information on the costs and benefits of inaction as well as the costs and benefits of action — both in qualitative terms and, where cost-effective and feasible, in quantitative terms. Such

Exhibit 3.3

Long-Recognized Need for New Options and Measures

Source	Summary Statement
November 1990 — National Action Strategy on Global Warming	• Called for a review of far-reaching measures that may be required to reduce greenhouse gas emissions, but that could have implications for the lifestyle of Canadians or important regional and economic impacts.
December 1990 — Canada's Green Plan	• The federal government indicated that, with its partners, it would begin examining and preparing additional measures that would yield more far-reaching changes in the way Canadians use energy.
November 17, 1993 — Joint Ministers Meeting (JMM)	• Joint announcement by the federal, provincial and territorial energy and environment ministers that they had instructed their officials to proceed with the development of options that will meet Canada's current commitment.
November 8, 1994 — JMM	• Joint announcement that the ministers had agreed to return to their respective governments to determine the full range of options.
February 20, 1995 — JMM	• Joint announcement that, in order to continue to close the gap, ministers agreed to proceed with the development of options that will meet Canada's stabilization goal and to report on their evaluation of the full range of options in November 1995.
November 20, 1995 — JMM	• Joint announcement indicating that it is important to continue to consider the full range of tools available to Canada to help meet its climate change commitments.
November 1996 — Review of the National Action Program on Climate Change (NAPCC)	• Concluded that opportunities existed for further progress by developing and implementing additional initiatives. • Noted that cost-effective opportunities remained and that Canada was not applying precautionary measures to the fullest.
December 12, 1996 — JMM	• Joint announcement that actions to date will not be sufficient to meet the stabilization target; called for speedy implementation of new initiatives, and further actions in addition to those announced at that time.
November 12, 1997 — JMM	• Joint announcement on the need to strengthen and broaden efforts under the NAPCC, including examining innovative approaches and reviewing measures across all sectors.

information is needed at regional, sectoral and individual levels and is required to make a sound cost/benefit decision on a portfolio of measures to address climate change. This information, an essential element for policy development and decision making, has not yet been fully developed and consequently cannot be communicated to Canadians.

3.117 The Canada Country Study (1997), prepared by Environment Canada in conjunction with stakeholders, represents the first national assessment of potential socio-economic and environmental impacts of climate change on Canada. While it does not quantify the potential costs to Canada of inaction, it does point out that a great deal of work remains to be done before the costs can be estimated.

Key element:
11 Costs and benefits of action and inaction analyzed — **Some progress**

3.118 The federal government, in conjunction with other levels of government and major stakeholders, should increase its efforts to obtain a clearer understanding of the costs and benefits of inaction as well as the opportunities inherent in dealing with climate change, and should communicate these to Canadians.

3.119 The federal government, in conjunction with other levels of government and major stakeholders, should develop a clearer understanding of the environmental, economic and social costs and benefits of possible measures to address climate change, as well as the distribution of these costs and benefits among regions, sectors and individuals.

3.120 The federal government should increase its efforts to develop a *federal* portfolio of measures to help meet Canada's climate change commitments, in consultation with other levels of government and major stakeholders.

3.121 The federal government, in conjunction with the other levels of government and major stakeholders, should make a concerted effort to obtain agreement on a broad *national* portfolio of measures designed to meet Canada's climate change commitments.

Monitoring Implementation of the National Action Program on Climate Change

The NAPCC requires a plan to implement its strategic direction

3.122 To translate the strategic direction of the NAPCC into action, we expected to find a comprehensive national implementation plan listing the key actions designed to achieve Canada's stabilization goal. We would expect this plan to describe who would undertake the actions, what resources would be allocated, when each action would be completed and what results were expected. We also expected that the federal government would have taken the lead in developing such a plan.

We found no written plan to implement the strategic direction of the National Action Program on Climate Change.

3.123 As already noted, the NAPCC itself is silent on how its strategic direction is to be implemented. Further, no agreements have been reached between federal and provincial or territorial governments or among federal entities on how a plan will be developed or progress monitored.

3.124 While all Canadians have a role in implementing the NAPCC, we found that nobody has been assigned overall responsibility for ensuring that Canada has a workable plan designed to meet the stabilization goal.

3.125 The 1996 review of the NAPCC found that, for some actions, no responsible decision makers had been identified or no action taken by any jurisdiction. Work done as part of the review also found that the NAPCC does not encompass all of the actions that are being undertaken to reduce greenhouse gas emissions.

3.126 Our own examination of the NAPCC found that the strategic direction for mitigation activities in four sectors (transportation, industry, residential and commercial, and agriculture and forestry) indicated that "Canada" would undertake certain actions. In our opinion, a plan is needed that indicates who specifically will undertake each of those actions.

3.127 However, we found no written plan to implement the strategic direction of the NAPCC. Furthermore, the fact that the list of actions under the NAPCC is not comprehensive makes it difficult to know who is working on other actions and what the actions are designed to accomplish.

Key element:
12 National implementation plan developed — **No progress**

Clear and concrete performance expectations have generally not been established

For most of the individual actions, no information was provided on the results achieved.

3.128 We expected to find clear and concrete performance expectations established for individual actions undertaken to implement the NAPCC. Performance expectations outline the performance that is targeted or expected in the future. Comparing achievements with stated expectations allows performance to be assessed and reported.

3.129 The 1996 review of the NAPCC found that performance expectations in the form of measurable results to be achieved had been developed for only a few of the individual actions under way. We believe that more work needs to be done in this area.

Key element:
13 Clear performance expectations established for individual actions — **Some progress**

Implementation milestones and interim targets have not been defined

3.130 The NAPCC specified only one goal: the stabilization of greenhouse gas emissions at 1990 levels by the year 2000. We found that no milestones or interim targets have been established to assess progress. It is important to know on a regular basis how much progress is being made against interim targets so that the actions under way can be adjusted and new approaches and measures introduced as required. In the absence of milestones and interim targets, it is difficult to take timely corrective action.

Key element:
14 Implementation milestones and interim targets identified — **No progress**

While many actions are being taken, what matters is the results

3.131 Our examination noted that despite the lack of a detailed implementation plan, many actions are being taken to address the climate change issue, including those under the Climate Change Voluntary Challenge and Registry (VCR) Program. The VCR Program, launched in early 1995 by federal, provincial and territorial energy and environment ministers, is the single most important new program established under the NAPCC. The VCR Program issued a challenge to Canadian companies and organizations and all levels of government to develop action plans to voluntarily limit or reduce their greenhouse gas emissions. It maintains a public registry that records commitments, plans and progress. In October 1997, it became a stand-alone not-for-profit corporation. The board of directors of this corporation includes representatives from the private sector, two federal departments (Environment Canada and NRCan) and three provincial governments.

3.132 The 1996 review of the NAPCC identified a total of 475 actions (policies

and programs or measures) by various levels of government. It noted that while the actions may not achieve short-term reductions in emissions, they may nevertheless be significant for other purposes, such as setting the basis for future action.

3.133 In November 1995, the federal government issued its Federal Action Program on Climate Change: Leading the Way Forward. It sets out the Government of Canada's agenda and concrete actions planned in pursuit of its long-term commitment to address climate change under the NAPCC, including leading by example by getting its own house in order. The Federal Action Program pertains only to federal departments and agencies.

3.134 At the same time, the federal government submitted its plan (Emission Reductions from Federal Operations) to the VCR Program. The expected contribution has been established only for federal operations as a whole and not for individual entities. The expected federal contribution is to surpass the stabilization goal for its operations by the year 2000 and to reduce its greenhouse gas emissions from 1990 levels by at least 20 percent by the year 2005.

3.135 In its October 1997 progress report to the VCR Program, it estimated that through various actions, and taking into account the effects of downsizing, total federal greenhouse gas emissions decreased by about 8 percent during the period 1990 to 1996. It also projected that its total emissions would be 18 percent lower in 2000 than in 1990, and 27 percent lower in 2005. While it is important for the federal government to set an example, its operations account for less than one percent of Canada's total greenhouse gas emissions.

3.136 The plan the federal government submitted to the VCR Program indicated that federal Crown corporations are excluded, noting that they are responsible for submitting their own action plans. Departmental officials have informed us that as of 1 January 1998, no federal Crown corporations are included in the VCR Program registry. If the federal government is to provide national leadership by example, we would expect to see broader participation in the VCR Program by federal Crown corporations. It was beyond the scope of this audit to determine whether Crown corporations have action plans in place to reduce their greenhouse gas emissions.

3.137 In our opinion, while many actions are being undertaken under the NAPCC, what matters is the results of the actions and whether the results will be sufficient to reach Canada's stabilization goal.

Key element:
15 Actions undertaken to achieve the goal — **Some progress**

Improved performance information is required

3.138 We previously assessed the performance information (performance expectations and performance achievements describing what was actually achieved) for one of the key elements of the NAPCC, NRCan's energy efficiency initiatives. The Auditor General's April 1997 Report chapter on NRCan's 16 energy efficiency initiatives not related to research and development found that the current performance information on them was not sufficient to determine the contribution they were making to Canada's stabilization goal.

3.139 The 1996 review of the NAPCC assessed the performance information for another of its key elements, the VCR Program. The 1996 review stated that the VCR Program had so far focussed on increasing participation and not on results expected or results achieved from action on the submitted plans. It noted that only about half of the action plans had quantified their achievements to date.

3.140 The 1996 review noted that the nature of the information provided on each NAPCC action makes it impossible in most cases to determine the quantitative impact of the action, but there was some qualitative information to indicate progress. Canada's Second National Report (1997) provided an overview of some of the actions being taken by all levels of government. For most of the individual actions, no information was provided on the results expected by the year 2000 or achieved to date. However, the report does provide limited aggregate information on expectations and achievements on a sector basis. In our view, additional qualitative information as well as quantitative information, where cost-effective and feasible to gather, would help decision makers judge whether the actions are succeeding and to what extent they can be relied upon to contribute to Canada's stabilization goal.

Key element:
16 Results-based information on performance made available to decision makers — **Some progress**

No agreement exists on broad-based performance indicators

3.141 Performance indicators are needed to monitor changes over time, evaluate differences across jurisdictions and reveal the underlying factors that influence trends in greenhouse gas emissions. As noted in Canada's first National Report on Climate Change (1994), climate change indicators must also provide insight into the underlying social, environmental, economic and technological factors that influence emission trends.

3.142 The NAPCC states that the ultimate indicator of progress will be the overall reductions in greenhouse gas emissions that the Program achieves, as demonstrated by the national greenhouse gas inventory. It also says that other broad-based socio-economic or environmental indicators of progress will be considered to ensure that Canada remains on track with the strategic directions established.

3.143 As part of the 1996 review of the NAPCC, work was done to identify potential indicators related to climate change from data that were currently available. Information presented in the review included number of households, commercial floor area, gross output of industry and vehicle kilometres travelled. Two other reports provide information on potential indicators related to greenhouse gas emissions and energy use — Trends in Canada's Greenhouse Gas Emissions, prepared by Environment Canada, and Energy Efficiency Trends in Canada Report, prepared by NRCan.

3.144 In our opinion, the existence of a variety of performance indicators in a number of documents does not constitute a national consensus on the standard set of broad-based socio-economic or environmental performance indicators that could be used by Canada to assess its overall progress.

Key element:
17 Development of broad-based performance indicators to be used to measure progress — **Some progress**

There is limited results-based monitoring of the NAPCC achievements

The National Action Program on Climate Change is silent on the regime to measure and monitor results.

3.145 It is important for the federal government, as well as Parliament, to know what the NAPCC has achieved over time. Therefore, we would expect to find a formal results-based monitoring system to record, assess and report progress against expectations in implementing the strategic direction of the NAPCC.

3.146 Although the NAPCC stipulates that action plans are to be verifiable, it is silent on the regime to be put in place to measure and monitor results. The National Air Issues Co-ordinating Committee was given responsibility for undertaking

formal reviews of the NAPCC every two years. These reviews are intended to inform stakeholders and policy makers of progress being made toward Canada's stabilization goal and to identify opportunities for further actions. The 1996 review of the NAPCC was its first review.

3.147 Some indicators of progress are reported in the two reports on trends referred to in paragraph 3.143, and also through the VCR Program. However, the 1996 review found that there was no procedure for regular and uniform reporting on all individual actions under the NAPCC. Work done as part of that review indicated that such a reporting procedure is essential for measuring progress and would lay a solid foundation for informed decision making and future evaluations.

3.148 The review concluded that while governments are building on previous initiatives and identifying new opportunities for action, there is little evidence of a systematic approach to sharing experience among jurisdictions on the benefits of individual measures. The review found that the NAPCC's overall effectiveness, as well as the usefulness of efforts to review it, are compromised by inadequate program co-ordination. Although the review recommended changes to the program's co-ordinating mechanism, we found no evidence of any such changes.

3.149 A review of the progress reports on action plans submitted to the VCR Program is being undertaken by NRCan.

3.150 In our opinion, the burden of proof is on the federal government, as national leader, to demonstrate that progress is being made as a result of the NAPCC, to assess what is working and what is not, to promote the sharing of lessons learned, and to encourage timely corrections as necessary. The current activity-based and informal performance monitoring does not achieve this.

Key element:
18 Performance monitored for results at regular intervals — **Some progress**

3.151 In summary, we were unable to find an implementation plan to put into operation the strategic direction set out in the NAPCC and to meet Canada's stabilization goal. The monitoring system is not adequate to ensure that concrete, results-based action is taken, that results are evaluated regularly, or that adjustments are made as required. In our opinion, Canada has failed to implement the strategic direction provided by the NAPCC.

3.152 The federal government should take the lead in making a concerted national effort, in conjunction with other levels of government and major stakeholders, to develop a formal, results-based implementation plan with performance expectations, including interim targets and a monitoring system, designed to achieve Canada's climate change commitments.

Information to Parliament Needs to Be Enhanced

3.153 Parliament has shown a long-standing interest in the climate change issue (see Appendix E). It is important that the actual results being achieved with the NAPCC are measured, reviewed and reported to Parliament in a way that provides it with the information it needs in its oversight of Canada's response to climate change and in a manner that ensures transparency and accountability. We would expect information to Parliament to be, among other things, meaningful and complete.

3.154 The Auditor General's 1994 Report chapter on information for Parliament stated that in any group of activities defined by the government as a

The lack of consolidated summary-level reporting to Parliament could hinder its oversight of Canada's response to climate change.

sectoral activity and carried out by more than one department or agency, one department has to be given the lead responsibility to provide a summary-level report to Parliament on the activity overall. We would expect that a consolidated summary-level report on the progress being made on Canada's national response to climate change, including references to additional information, would be tabled in Parliament.

3.155 As we have already noted, there is no written agreement on the specific roles and responsibilities of federal players for reporting to Parliament on the climate change sectoral activity, including the lead role to consolidate the information.

Reporting to Parliament is fragmented and piecemeal

3.156 Various departments and agencies have tabled a number of documents in Parliament that contain information related to Canada's national response to climate change. Given that Environment Canada and NRCan are the federal co-leaders on climate change, our review focussed primarily on documents prepared by them. These documents include Reports on Plans and Priorities, Performance Reports, Sustainable Development Strategies and NRCan's annual Report to Parliament on the Administration and Enforcement of the *Energy Efficiency Act*.

3.157 These reports contain several references to various federal initiatives related to climate change and provide general information on them. They also contain some cross-references to climate change matters in other documents, some of which have been tabled in Parliament.

3.158 We noted that although the amount of information to Parliament on the climate change issue has increased over the last few years, it has been reported in isolated segments scattered throughout several documents. In our view, this fragmented and piecemeal reporting makes it difficult for Parliament to oversee the climate change sectoral activity.

3.159 There are numerous other documents that provide general information on climate change and information on Canada's related initiatives. These documents are not tabled in Parliament but are in the public domain. We have already referred to several of them in this chapter. Four of the most significant are the National Action Program on Climate Change (NAPCC), the 1996 review of the NAPCC and Canada's 1994 and 1997 National Reports on Climate Change — Actions to Meet Commitments under the *United Nations Framework Convention on Climate Change*.

Summary-level information on climate change is incomplete

3.160 We believe that Parliament is not being provided with meaningful and complete summary-level information. To a certain degree, the issue is not a lack of general information on climate change at the operational level but a lack of information at the broader or overall level. Information at a summary level would, for example, inform Parliament about the federal government's roles and responsibilities, including its national leadership role, its accountability for implementing the NAPCC, the results being achieved and, to the extent possible, the human and financial resources allocated to addressing climate change. However, due in part to deficiencies we have already described (lack of clear roles and responsibilities, absence of an implementation plan, and a limited results-based monitoring system), this information has not been produced.

3.161 In our opinion, this lack of consolidated summary-level reporting to Parliament could hinder its ability to

provide effective oversight of Canada's response to climate change.

Key element:
19 Summary-level reports tabled in Parliament — **No progress**

3.162 The federal government should enhance its reporting to Parliament on the climate change sectoral activity by assigning a lead department to prepare a consolidated, summary-level report on a periodic basis.

Conclusion

The Federal Government Has Not Applied Sound Management Principles

3.163 We recognize that meeting the ultimate objective of the *United Nations Framework Convention on Climate Change* is expected to be a long-term journey with several interim steps along the way. The National Action Program on Climate Change is Canada's initial step. We also recognize that responding to climate change poses a huge challenge for the federal government. Nevertheless, we would expect the government to apply sound management principles to help meet this challenge.

3.164 Our assessment of the federal government's management of the implementation of Canada's domestic policy commitment on climate change has been provided throughout the chapter as well as in the exhibit in the **Executive Summary**. Overall, we found that the federal government has not applied sound management principles. The result is an implementation gap, with Canada's performance falling far short of its long-standing domestic policy commitment. This gap reflects the failure to translate policy direction into effective action. The federal government's leadership role in the climate change issue has not been clearly defined, and appears to be largely a passive one.

3.165 In our opinion, if Canada is to meet its climate change commitments, strong federal leadership is required to build upon the strategic direction of the NAPCC. The federal government has a responsibility to lead the nation in developing a realistic, broad-based and cost-effective response to climate change that minimizes any negative impact and maximizes any positive impact on Canada's economy and international competitiveness.

The federal government has a responsibility to lead the nation in developing a response to climate change.

3.166 We noted that the federal, provincial and territorial ministers of energy and the environment agreed, in November 1997, to work collaboratively to develop a national implementation plan following the December 1997 Kyoto Conference on climate change. Since then, the federal government has agreed to take the lead in developing such a plan.

3.167 In this chapter, we have made a number of recommendations based on our examination of Canada's attempts to reach its stabilization goal. These recommendations are also relevant to meeting any new climate change commitments that Canada may set, and thus can serve as lessons learned for the future.

Improved Management of Horizontal Issues Is Required

3.168 A growing number of public policy issues cut across departmental mandates and political jurisdictions. The mandates, resources and expertise to deal with such policy issues lie in a number of federal departments, agencies and other entities as well as other levels of government. These so-called horizontal issues such as climate change are a particular challenge for governments because of their complexity and interdependence. But these challenges are not unique to climate change. There are many areas in which federal and

Horizontal issues are a particular challenge for governments but are not unique to climate change.

provincial governments have a shared interest in policy questions. In dealing with these issues, the federal government needs to address its collective responsibility to serve the broader public interest through interdepartmental and interjurisdictional collaboration and through consultation with stakeholders.

3.169 In 1995, a federal task force reported on its review of 16 case studies of federal-provincial co-operation in policy work. It found that success depended on a number of factors: building trust, which requires openness and careful attention to the interests of all parties; working within existing mechanisms of co-operation such as standing committees of officials; and developing a shared sense of the need to collaborate.

3.170 In our opinion, the federal government needs to develop a more appropriate and comprehensive process for providing federal leadership and management of climate change, a horizontal issue that falls into an area of shared jurisdiction and shared accountability.

3.171 In issues such as climate change that involve reconciliation of a wide range of political and economic interests, it is clear that effective and sustained central co-ordination will be necessary. Mechanisms must be in place that involve decision makers at the highest level to resolve issues as they arise. Such processes necessarily require that the government's central co-ordinating agencies play a strong and continuing role.

3.172 In future work, our Office will continue to identify factors and principles that support accountable management and effective accountability relationships in federal partnering arrangements on issues that cut across departmental mandates and political issues.



About the Audit

Objective

Our audit objective was to assess the adequacy of the federal government's management of the implementation of Canada's domestic policy commitment on climate change, that is, to stabilize greenhouse gas emissions at 1990 levels by the year 2000 (commonly referred to as Canada's stabilization goal). In doing so, we:

- determined whether accountability arrangements exist and whether the roles and responsibilities of all parties to the National Action Program on Climate Change (NAPCC) have been clearly identified, understood and agreed upon;
- assessed the adequacy of the federal effort in implementing the strategic direction of the NAPCC, and in monitoring the implementation of the NAPCC;
- assessed reporting to Parliament on the climate change issue; and
- assessed the adequacy of federal activities in developing a national public awareness and education program for climate change, as prescribed by the NAPCC.

Scope

The audit examined Canada's current domestic policy commitment and the implementation of the NAPCC, which sets strategic directions in pursuit of Canada's stabilization goal. Given the domestic and federal focus of our audit, our work involved mainly the federal environment and energy departments, Environment Canada and Natural Resources Canada, although we recognize that aspects of climate change concern all federal departments, agencies and other federal entities and are, therefore, sectoral in nature.

The quantitative information in this chapter has been drawn from the various government sources indicated in the text. Although this quantitative information has been checked for reasonableness, it has not been audited unless otherwise indicated.

Audit Methodology

During the planning phase of our climate change audit work, we held a climate change symposium to assist the Office in gaining a basic understanding of the issues related to the subject of climate change. We also interviewed over 70 stakeholders across Canada, representing a broad range of interests and many differing viewpoints. We obtained their perspectives on the climate change issue and their views on the federal government's role in addressing it.

As a result of this and of other audit work, a number of potential issues related to climate change were identified, not all of which could be dealt with in this first audit. We expect to conduct future climate change work in such areas as auditing the management of the science of climate change and assessing whether there is a level playing field between fossil fuels and other forms of energy. Other potential issues for audit work include implementation of Canada's adaptation strategy, federal leadership related to alternative sources of energy and assessing the extent to which the federal government has its own house in order in responding to climate change.

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APPENDIX A

What Is Climate Change?

Climate includes all the elements of weather, such as temperature, precipitation, sunshine and wind patterns. Weather comprises these elements at a particular time in a specific location. Climate change refers to changes in the climate or "average weather" of a given location over a period of time. It includes both warming and cooling trends. Climate change also refers to changes in all the interconnected weather elements of a region or the planet over a period of time.

Although climate change and global warming are often used interchangeably, global warming is only one aspect of climate change. Global warming pertains only to changes in the climate related to a long-term increase in the average temperature of the Earth.

The Earth's climate has changed dramatically over the course of the history of the planet, but it has been relatively stable for the past 10,000 years. While climate change is not a new phenomenon, the present concern is largely over the accelerated rate of increase in the concentration of greenhouse gases in the atmosphere and its possible link to climate change.

The mix of greenhouse gases includes water vapour, carbon dioxide, methane and nitrous oxide. These gases are instrumental in producing a greenhouse effect, which stores heat that would otherwise escape the Earth's atmosphere. If these gases build up, they could store more heat, which could lead to climate change.

While the greenhouse effect occurs naturally and keeps the Earth warm enough to sustain life, many scientists believe that human activities are intensifying this natural process. Such activities include increased burning of fossils fuels such as oil, natural gas and coal; changes in land use such as deforestation and poor agricultural practices; and expansion of human population.

APPENDIX B

Federal-Provincial/Territorial Co-ordinating Framework for Air Quality Issues

Given that jurisdiction over environmental matters is shared, a number of agreements and co-ordinating mechanisms have been set up for federal, provincial and territorial co-operation in an effort to obtain broad-based agreement for actions.

In 1989, the first ministers of the federal and provincial governments endorsed a Statement of Interjurisdictional Co-operation on Environmental Matters. It identified the need for co-ordinated responses from both levels of government to environmental issues with interjurisdictional impacts, such as climate change. This statement provided the overall framework for joint environmental action between the two levels of government.

Since 1993, co-ordination between federal and provincial/territorial environment and energy administrations has taken place primarily through joint meetings of the Canadian Council of Ministers of the Environment and the Council of Energy Ministers. For the last few years, they have met at least once a year. These joint meetings are often referred to as Joint Ministers Meetings (JMM). At the JMM, the ministers deal with a variety of common air quality issues.

In November 1993, the JMM approved a Comprehensive Air Quality Management Framework for Canada. This framework agreement provides a formal basis for, and encourages all jurisdictions to co-ordinate and co-operate in, the management of all air quality issues, including climate change, and to do so within the context of sustainable development. Thus, the JMM serves as the highest level of a national process to develop direction and statements of intent on climate change.

The JMM established a National Air Issues Co-ordinating Mechanism (NAICM) in 1993 to implement the framework agreement. The NAICM generally serves as a forum to foster partnerships and co-operative discussions among environment and energy departments and to build consensus among jurisdictions on identifying and resolving multi-jurisdictional air quality issues. Its purpose is to co-ordinate progress domestically and to provide advice to the federal government on the development of international positions on such issues as climate change.

The NAICM consists of a steering committee and a co-ordinating committee. The National Air Issues Steering Committee (NAISC) comprises federal and provincial deputy ministers of environment and energy and reports to the JMM. The subcommittee of the NAISC, the National Air Issues Co-ordinating Committee (NAICC), comprises federal and provincial assistant deputy ministers, typically from the environment and energy departments.

The NAICC, as a component of the NAICM, provides an opportunity to reach a better understanding of government positions, to set up processes for stakeholder consultation and to reach a broad consensus on priority air quality issues. It is not a policy-making or decision-making body. The NAICC established a Climate Change Working Group to act as a focal point for climate change issues, covering both domestic and international aspects. The NAICC is supported by a Stakeholder Advisory Committee.

The National Action Program on Climate Change (NAPCC) was developed under the direction of the NAICM and approved by the JMM in 1995 as Canada's response to the *United Nations Framework Convention on Climate Change*. Since then, the NAICM has played a role in co-ordinating the implementation of the NAPCC among governments.

APPENDIX C

Examples of Key Activities in Environment Canada Relating to Climate Change

Environment Canada has many activities to support Canada's domestic and international response to climate change. Several of its key activities, as reported in its Reports on Plans and Priorities, Performance Reports, Sustainable Development Strategy and other public documents, help to mitigate greenhouse gas emissions, to improve scientific understanding of the issue, and to adapt to potential climate change. Examples of these activities are listed below.

Science

- Monitors climate and climate change
- Develops global and regional climate circulation models
- Participates in international science of climate change
- Researches climate change, including climate impact and adaptation research
- Maintains national inventories of greenhouse gas emissions
- Analyzes non-energy greenhouse gas emission sources
- Leads the Canada Country Study
- Participates in international collaborative projects such as the Boreal Ecosystem Atmosphere Study
- Produced State of the Environment reports including a section on climate change

Education

- Promotes "green" (environmentally friendly) technologies
- Works with different levels of government and stakeholders on reducing their greenhouse gas emissions
- Develops climate change outreach initiatives including public awareness campaigns
- Strengthens voluntary actions that involve all Canadians
- Promotes energy efficiency and renewable energy

Other

- Develops overall environmental policy on climate change
- Involved in negotiating international commitments to respond to climate change
- Conducts economic and environmental modelling and socio-economic impact analysis
- Prepares, jointly with Natural Resources Canada, Canada's "National Reports" on Climate Change
- Publishes, jointly with Natural Resources Canada, an annual report on greenhouse gas emissions from federal operations
- Supports the implementation of the National Action Program on Climate Change

APPENDIX D

Examples of Key Activities in Natural Resources Canada Relating to Climate Change

Natural Resources Canada has many activities to support Canada's domestic and international response to climate change. Several of its key activities, as reported in its Reports on Plans and Priorities, Performance Reports, Sustainable Development Strategy and other public documents, help to mitigate greenhouse gas emissions, to improve scientific understanding of the issue, and to adapt to potential climate change. Examples of these activities are listed below.

Science

- Conducts remote sensing for monitoring the environment
- Undertakes science related to better understanding past environmental conditions and climate
- Undertakes science related to climate variability and climate change and impacts on, for example, the permafrost regime of northern Canada
- Participates in international science of climate change
- Participates in international collaborative projects such as the Boreal Ecosystem Atmosphere Study

Energy Initiatives

- Provides public information
- Issues regulations (*Energy Efficiency Act*)
- Conducts research and development on:
  - energy efficiency technologies including reducing greenhouse gas emissions from fossil fuel production,
  - alternative transportation fuels, and
  - renewable energy
- Champions the Climate Change Voluntary Challenge and Registry (VCR) Program
- Analyzes forecasts of energy production and use
- Analyzes trends in energy-related greenhouse gas emissions
- Assists other federal departments to use energy more efficiently
- Publishes, jointly with Environment Canada, an annual report on greenhouse gas emissions from federal operations

Forestry Measures

- Promotes understanding of the role of forests in climate change
  - develops a carbon budget model to measure carbon sequestration and releases from forests
- Promotes sound forest management through, for example, Canada's network of Model Forests and the Tree Canada Foundation program

Other

- Leads in developing and co-ordinating Canada's domestic implementation strategy
  - analyzes and develops new mitigation measures
- Conducts economic modelling
- Involved in negotiating international commitments to respond to climate change
- Prepares, jointly with Environment Canada, Canada's "National Reports" on Climate Change

APPENDIX E

Parliamentary Interest in Climate Change

Parliament has demonstrated a long-standing interest in the climate change issue and meeting Canada's climate change commitments. In 1989, the House of Commons Standing Committee on the Environment launched its "Our Changing Atmosphere" series of studies that dealt with climate change, among other things. The Committee issued two reports on climate change as a result of its study. Below is a list of these and other parliamentary committee reports that have dealt with the climate change issue, together with some selected highlights.

In addition to these parliamentary committee reports, the subject of climate change has been raised in the House of Commons and in the Senate, most recently in the fall of 1997 in connection with the Kyoto Conference.

Parliamentary Committee Interest in Climate Change

Committee/Report	Selected highlights
October 1990 — House of Commons Standing Committee on Environment, interim report titled "No Time to Lose: the Challenge of Global Warming" in its Our Changing Atmosphere series	• contained 17 recommendations that address climate change issues
March 1991 — House of Commons Standing Committee on Environment, final report titled "Out of Balance: the Risks of Irreversible Climate Change" in its Our Changing Atmosphere series	• noted that climate change represents a severe threat to both Canada and the planet as a whole • called for action to be taken now, not in 3 to 5 years from now, to substantially reduce the rate of greenhouse gas emissions • called for stronger and more visible national leadership on climate change • contained the 17 recommendations referred to in the Interim Report • suggested that Canada's support of the objective of stabilizing carbon dioxide emissions at 1990 levels by 2000 was not sufficient, and that well before 2000 this target should be revised
February 1992 — House of Commons Standing Committee on Energy, Mines and Resources, report titled "Sustainable Energy and Mineral Development: A Realistic Response to the Environmental Challenges", An Interim Report on the Issue of Global Climate Change	• made 4 recommendations that addressed climate change, including the need for a detailed action plan and the need to identify the potential costs and benefits of alternative strategies
January 1993 — House of Commons Standing Committee on Energy, Mines and Resources, report titled "Sustainable Energy and Mineral Development: A Realistic Response to the Environmental Challenges"	• made 31 recommendations related to sustainable energy and mineral development, including 4 recommendations specifically related to greenhouse gas emissions that addressed climate change

Appendix E (cont'd)

Committee/Report	Selected highlights
January 1993 — Standing Senate Committee on Energy, the Environment and Natural Resources, report titled "The Energy Emissions Crisis: A Viable Alternative"	• study on policy options for containing emissions associated with energy production and use in Canada, which included 7 recommendations
April 1993 — House of Commons Standing Committee on Environment, report titled "A Global Partnership"	• made 9 recommendations related to mechanisms that the federal government might initiate to achieve Canada's stabilization goal
June 1995 — House of Commons Standing Committee on Environment and Sustainable Development, report titled "It's About Our Health! Towards Pollution Prevention, CEPA (*Canadian Environmental Protection Act*) Revisited"	• strongly recommended, among other things, that the federal government meet its international climate change commitment and that it use, where appropriate to do so, Part V of CEPA, which includes general enabling provisions for the implementation of international air pollution obligations
December 1995 — House of Commons Standing Committee on Environment and Sustainable Development, report titled "Keeping a Promise: Towards a Sustainable Budget"	• provided recommendations related to federal fiscal disincentives to sound environmental practices; many of the recommendations relate to reducing greenhouse gas emissions
November 1997 — House of Commons Standing Committee on Natural Resources and Government Operations, report titled "The Kyoto Conference on Climate Change: Let's Get The Ball Rolling"	• called for the federal government in co-operation with its partners to strive to achieve a revised stabilization goal by 2010, while taking all possible measures to minimize any negative impact on Canada's economy and international competitiveness • called for precaution and prevention instead of waiting to react to a problem whose reversibility may be difficult to judge
December 1997 — House of Commons Standing Committee on Environment and Sustainable Development, report titled "Kyoto and Beyond: Meeting the Climate Change Challenge"	• expressed concern about the overall lack of progress made to date in meeting Canada's current commitment • offered a number of concrete suggestions for ways in which Canada's performance might be improved

Chapter 4

Canada's Biodiversity Clock Is Ticking

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants. The numbered paragraphs in bold face represent recommendations.

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Canada's Biodiversity Clock Is Ticking

Main Points

4.1 Biodiversity is the variety of life on Earth. It includes all life forms and their associated biological systems. The conservation and sustainable use of biodiversity is a highly complex issue. Attaining and promoting a better understanding of biodiversity conservation requires a concerted and integrated effort on behalf of all jurisdictions, sectors and interests in Canada.

4.2 Jurisdiction over environmental matters like biodiversity is shared between the federal and provincial governments. Dialogue at relevant ministerial councils is necessary to ensure that biodiversity issues are addressed across Canada. We were told that biodiversity needs to figure more prominently and frequently in the agendas of the fisheries, forestry, agriculture, wildlife, parks and environment ministerial councils.

4.3 Canada was the first industrialized country to ratify the *United Nations Convention on Biological Diversity*. Canada's primary response to the Convention has been the development of the Canadian Biodiversity Strategy. The Strategy is an important first step in providing a national framework for jurisdictional and sectoral planning and reporting on biodiversity.

4.4 Canada has been slow to implement the Canadian Biodiversity Strategy and deadlines have been missed. Federal implementation of the Strategy is still in its early stages as only two of eight federal biodiversity implementation plans (modules) have been completed to date.

4.5 Completed modules do not contain time frames, resources to be allocated, expected results or performance indicators. An overall federal implementation plan, incorporating these elements, is needed to achieve national goals and to judge Canada's performance on biodiversity against our international commitments.

4.6 *Canada's National Report to the Conference of the Parties to the Convention on Biological Diversity*, currently in draft form, recognizes many challenges associated with biodiversity and identifies activities that are occurring in Canada. However, the Report is missing many elements, such as targets and time frames that are needed to operationalize and fully implement the Canadian Biodiversity Strategy.

4.7 Future reporting at the international, federal and provincial levels needs to reflect progress against predetermined measurable targets. This will allow for results-oriented reporting and a rigorous evaluation of achievements to date.

Introduction

4.8 The diverse collection of animals, plants and micro-organisms, from the simplest forms to those more visible to us, such as wild animals and birds, constitutes our "natural world" and contributes to our economic, social and environmental well-being. This living mosaic constitutes biodiversity (Exhibit 4.1).

4.9 The conservation and sustainable use of biodiversity is fundamental to survival on the planet. This has been recognized as an international issue, with economic implications that scientists estimate to be in the billions of dollars (Exhibit 4.1). Meeting the challenge of addressing the adverse impacts on biodiversity over the last century and using biological resources in a sustainable manner now and in the future requires a concerted and integrated effort on behalf of all jurisdictions, sectors and interests in Canada.

4.10 Our audit objective was to assess the progress made by the federal government in implementing the requirements of the *United Nations Convention on Biological Diversity* and

Exhibit 4.1

Key Biodiversity Concepts

Biological Diversity or Biodiversity

The variability among living organisms from all sources including, among others, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species and between species and diversity of ecosystems.

Ecosystem: A dynamic system of plants, animals and micro-organisms and their non-living environment interacting as a functional unit.

(**Source:** *Convention on Biological Diversity*, June 1992.)

Value of Biodiversity

Canada's biodiversity, including the benefits from the use of biological resources, is annually worth $70 billion in the raw (before value enhancement by manufacturing, services, etc.), sustains millions of jobs and provides the ecological functions that sustain the planet locally and globally.

(**Source:** *Canada's Biodiversity*, Ted Mosquin, Peter G. Whiting, Don E. McAllister, 1995)

Key Issues Identified in Interviews with Stakeholders

- Canadians do not understand the word "biodiversity".
- There is a lack of interdepartmental-intergovernmental and external stakeholder co-ordination.
- There is a lack of resources for the Biodiversity Convention Office, individual departments and scientific support.
- There is no overall federal implementation plan for biodiversity.
- There were concerns about the proposed Canadian Endangered Species legislation, which was introduced in October 1996 and died on the order paper in 1997 when the House of Commons was prorogued.

The Objectives of the *Convention on Biological Diversity*

- conservation of biodiversity
- sustainable use of biological resources
- fair and equitable sharing of benefits resulting from the use of genetic resources

(**Source:** *Convention on Biological Diversity*, June 1992)

The Biodiversity Convention Office has brought a variety of interests together to encourage dialogue.

the Canadian Biodiversity Strategy. We began by comparing the current status against the expectations laid out by the government in its own planning documents.

4.11 Our assessment of the progress made in both planning and reporting revealed that federal implementation of the Canadian Biodiversity Strategy is still in its early stages. As a result, we decided to scale back the scope of the audit and defer further audit work until the implementation of the Canadian Biodiversity Strategy is more fully advanced.

4.12 The observations contained in this chapter are based on information gathered from consultation with various government officials, experts from other sectors and document review. Stakeholders who were interviewed identified a number of key issues (Exhibit 4.1). In order to gain an insight into how departments are implementing the Canadian Biodiversity Strategy, we reviewed the biodiversity action plan of one department, Agriculture and Agri-Food Canada. The results of this work are presented as a case study in the Appendix. Further details on the audit are in **About the Audit** at the end of the chapter.

Exhibit 4.2

Five Goals of the Canadian Biodiversity Strategy

- Conserve biodiversity and use biological resources in a sustainable manner.
- Improve our understanding of ecosystems and increase our resource management capability.
- Promote an understanding of the need to conserve biodiversity and use biological resources in a sustainable manner.
- Maintain or develop incentives and legislation that support the conservation of biodiversity and the sustainable use of biological resources.
- Work with other countries to conserve biodiversity, use biological resources in a sustainable manner and share equitably the benefits that arise from the utilization of genetic resources.

Observations

Canada's International Commitment

4.13 In response to the concern over the continued worldwide loss of plant and animal species and habitats, the *Convention on Biological Diversity* was signed by Canada at the June 1992 Earth Summit in Brazil and ratified in December 1992. Canada was the first industrialized country to ratify the *Convention on Biological Diversity* and commit to its three objectives (Exhibit 4.1).

4.14 Environment Canada, through its Biodiversity Convention Office (BCO), represents national interests in international forums. The BCO, which regards its role as essentially one of facilitator and catalyst, is responsible for co-ordinating and reporting on Canada's performance against the objectives of the Convention. One of the strengths of the BCO has been its ability to bring diverse interests to the table to encourage consideration of the conservation and sustainable use of biodiversity by a variety of sectors both within and outside government.

4.15 Article 6 of the *Convention on Biological Diversity* indicates that signatories should have developed national strategies, plans or programs and integrated biodiversity into sectoral and cross-sectoral plans, programs and policies. Canada's primary response has been the development of the Canadian Biodiversity Strategy. The Strategy is an important first step in providing a national framework for jurisdictional and sectoral planning and reporting.

Canada's Biodiversity Strategy

4.16 Following ratification of the *Convention on Biological Diversity*, the BCO co-ordinated a federal-provincial-territorial working group that was tasked with completing the Strategy by

November 1994. A key component of the Strategy's development was extensive consultation with stakeholders including industry, the scientific community, conservation groups, academia and Aboriginal organizations. While the completed Strategy was presented to the Canadian Council of Ministers of the Environment (CCME) in November 1994, it was not released until November 1995 and did not receive ministerial endorsement from all jurisdictions until April 1996. Federal, provincial and territorial governments are now committed to its five goals (Exhibit 4.2).

4.17 A report on policies, programs, strategies and actions that are under way to implement the Strategy was to be produced by each jurisdiction, including the federal government, by April 1997. We note that many of these progress reports intended to facilitate implementation of the Strategy have yet to be completed (see paragraphs 4.21 to 4.25).

International reporting needs improvement

4.18 The Biodiversity Convention Office is also responsible for preparing *Canada's National Report to the Conference of the Parties to the Convention on Biological Diversity.* This first Report to the UN Secretariat, which was due December 1997, is intended to provide an update on Canada's implementation of Article 6 of the Convention. The BCO indicates that this Report has been prepared using the general guidelines reflected in the Conference of the Parties (COP) decision II/17 (November 1995).

4.19 The BCO has produced a draft report that presents a general assessment of progress and identifies deficiencies that exist in Canada in implementing the Convention. The report identifies gaps in Canada's scientific understanding, Canada's eroding national capacity to address those gaps, the declining number of taxonomists in Canada, and the problems of improving biological

Many progress reports have yet to be completed.

- Determine the specific targets to meet the local, national and international goals in terms of protecting, assessing, utilizing and benefiting from biodiversity and its components.
- Summarize and assign relative priorities to the strategic recommendations that have been selected for implementation to cover the gaps, including activities, policies and tasks.
- Describe who has agreed to be responsible for particular activities and investments, for example, the public and private entities, communities and industries.
- Present the detailed activities, tasks and policies to be implemented. Explain which partner (ministry, industry, indigenous group, non-government organization (NGO) or university) will implement each item, where and what measures the partners will employ.
- Present a timetable for the implementation of the various tasks, reflecting priorities that have been assigned. Note signposts to help signal progress or delay.
- Provide the budget for the plan of action showing funding requirements for operating expenses, capital purchases, transport and field costs. List the personnel needed by category of skill or background, the facilities and services required and possible international technical and financial co-operation.
- Explain the measures to be used for tracking the results of the action plan and for monitoring changes in the economy, environment and society. Give the indicators that will be used. Present individuals and organizations that will carry these responsibilities and indicate how they were selected. Note the audience for the reports, along with the document's content and timing of implementation.

(**Source:** *A Call to Action: Decisions and Ministerial Statement from the Second Meeting of the Conference of the Parties to the Convention on Biological Diversity,* November 1995)

Exhibit 4.3

Suggested Guidelines for National Reporting Not Addressed in Canada's Report to the United Nations

inventories and accessing existing biological data. The report also identifies the need for better measures of performance and biodiversity indicators.

4.20 However, the report is missing many elements from the COP Guidelines, outlined in Exhibit 4.3, that are needed to operationalize and fully implement the Canadian Biodiversity Strategy. These elements would enhance the usefulness of national reporting.

Federal Implementation of the Canadian Biodiversity Strategy

An overall federal implementation plan for the Strategy does not exist.

Key federal entities

4.21 The conservation and sustainable use of biodiversity is a government-wide responsibility, although the major portion of the workload is carried by a core group of federal entities (Exhibit 4.4).

The usefulness of biodiversity "modules" is limited

4.22 Individual departments are currently developing a series of biodiversity action plans to implement the Canadian Biodiversity Strategy. These plans, or modules, as they are referred to by the Biodiversity Convention Office, are intended to respond to the Canadian Biodiversity Strategy by reporting on existing or planned activities. The eight modules are to describe federal biodiversity initiatives relating to wildlife, agriculture, forestry, protected areas, aquatic systems and cross-cutting issues such as education, ecological management and international co-operation.

4.23 At the time of our audit, only two of eight modules had been completed (agriculture and forestry). We commend the departments of Agriculture and Agri-Food Canada and Natural Resources Canada (Canadian Forest Service) for their leadership. The modules are a valuable tool for focussing and co-ordinating activities in their respective departments and providing information on these activities to the reader. However, the usefulness of the modules is limited as they do not contain time frames, resources to be allocated, expected results or performance indicators.

A federal implementation plan is required

4.24 Co-ordination of the Strategy would be facilitated by an overall federal implementation plan. The Biodiversity Convention Office indicated that it will produce a document summarizing all of the modules once they have been completed. However, if the content and structure of the existing and remaining modules do not incorporate time frames, resources to be allocated, expected results or performance indicators, it is our view that the completed set, regardless of a summary document, will not constitute a sufficient federal implementation plan.

Accountability for program delivery resides with individual departments

4.25 Ultimate responsibility and accountability for ensuring that biodiversity is fully integrated into departmental operations rests with individual departments. In addition to the modules previously discussed, another important instrument to ensure accountability is the sustainable development strategy. The 1995 amendments to the *Auditor General Act* require ministers to prepare and implement sustainable development

Exhibit 4.4

Key Federal Entities for Implementing the Canadian Biodiversity Strategy

- Agriculture and Agri-Food Canada
- Canadian Heritage (includes Parks Canada)
- Canadian International Development Agency
- Canadian Museum of Nature
- Environment Canada
- Fisheries and Oceans
- Foreign Affairs and International Trade
- Indian and Northern Affairs Canada
- Natural Resources Canada (includes Canadian Forest Service)

strategies with action plans. In our opinion, the strategies and action plans, where relevant, should address the conservation and sustainable use of biodiversity. Without a demonstrated link to sustainable development, there is a risk that biodiversity will not be integrated into federal government operations, which may result in a loss of genetic resources, species or habitats.

Issues of National Concern

4.26 In order for biodiversity to be effectively managed, it is important that the following issues be addressed: adequacy of resources, federal-provincial co-ordination, and results measurement and reporting.

Resources available may be inadequate

4.27 Stakeholders indicated that, in their opinion, the present level of resources dedicated to biodiversity is inadequate for the magnitude of the task at hand. This was manifest on three levels, namely the Biodiversity Convention Office within Environment Canada, resources available to federal and provincial departments to facilitate biodiversity initiatives, and, most important, the support for science pivotal to the understanding of biodiversity. Given the views expressed by stakeholders regarding resources, there is a possibility that Canada will not be able to meet and fulfil the expectations of the Canadian public who, when the meaning of biodiversity is explained to them, understand the importance of assigning a high priority to conserving biodiversity.

Federal-provincial co-ordination needs focus

4.28 Biodiversity must be addressed within the framework of the *Constitution Act*. While the Act makes no specific mention of the environment in the division of powers between the federal and provincial governments, each level of government has powers that affect it. As a result, jurisdiction over environmental matters like biodiversity is shared. One of the impediments to federal-provincial co-ordination and to developing momentum for implementation of the Strategy appears to be the absence of predictable, planned opportunities for high-level interjurisdictional discussions of biodiversity issues.

4.29 There are varied opinions on the extent of ongoing direction provided by federal and provincial ministers for biodiversity. We were told that biodiversity needs to figure more prominently and frequently in the agendas of the relevant ministerial councils, that is, fisheries, forestry, agriculture, wildlife, parks and environment. Dialogue at this level is necessary to ensure that biodiversity issues are addressed across Canada and that there is accountability for results, a concern expressed by stakeholders during our interviews.

There is a risk that biodiversity will not be integrated into federal government operations.

Stakeholders questioned the adequacy of resources.

Results measurement and reporting must be more rigorous

4.30 Evaluating biodiversity performance will require that results measurement and reporting constitute an integral component of the biodiversity framework. The Biodiversity Convention Office advised us that establishing such a framework for measuring biodiversity performance, both federally and nationally, will be particularly challenging. The BCO stated that scientific information on biodiversity is not nearly as well advanced as it is for some other environmental issues. For example, only half the species thought to exist in Canada have been named, with only one percent of those having been studied. The BCO also stated that biodiversity indicators are not yet well developed.

4.31 The Biodiversity Convention Office feels that Canada is still a long way from being able to produce a "state of biodiversity" report that would provide a

Canada is a long way from producing a "state of biodiversity" report.

better understanding of the state of biodiversity in Canada. As Exhibit 4.5 demonstrates, the number of species that have been identified as being "at risk" (vulnerable, threatened, endangered, extirpated, extinct) in Canada is increasing. The BCO has indicated that this increase may be attributable, in part, to our improved ability to identify species "at risk" and potential threats to species, such as habitat disruption. Seven species have been delisted, indicating improvement in some areas. The BCO expressed concern, however, that Canada's scientific capacity currently does not enable us to analyze the impacts of Canada's biodiversity initiatives on the increasing number of species listed as "at risk".

Conclusion

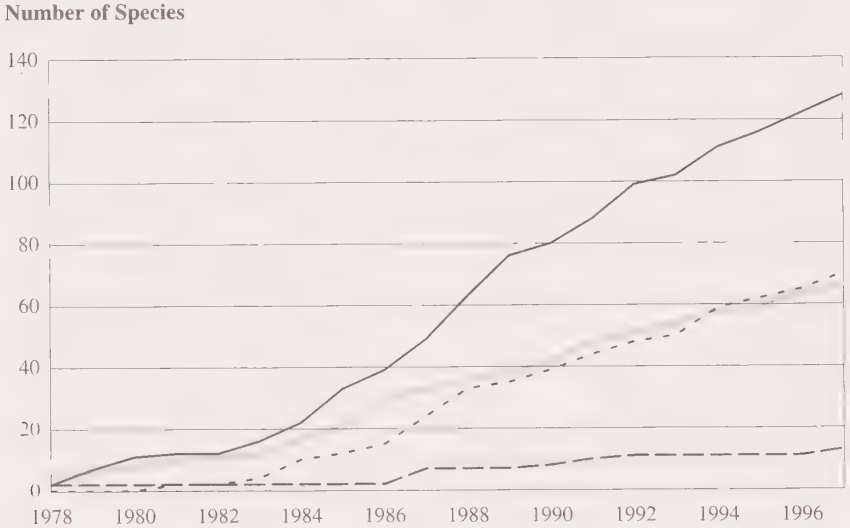
4.32 While the *Convention on Biological Diversity* has been in place for six years, progress has been slower than projected and deadlines have been missed.

4.33 A federal implementation plan is a necessary tool to achieve national goals and to judge performance on the conservation and sustainable use of biodiversity against our international commitments.

4.34 Future reporting at the international, federal and provincial levels needs to reflect progress against predetermined measurable targets. This will allow for results-oriented reporting and a rigorous evaluation of achievements to date.

Exhibit 4.5

Number of Species "At Risk" in Canada



Source: Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Listings from World Wildlife Fund web site

——— **Vulnerable** - species that exist in low numbers or in restricted ranges due to overexploitation, extensive habitat destruction or other factors.

Threatened - species that are likely to become endangered if the natural or human pressures causing them to be vulnerable are not reversed.

- - - - - **Endangered** - species that are threatened with immediate extinction or extirpation if the factors threatening them continue to operate. Included are species whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate danger of extinction.

- - - - **Extirpated** - species that are no longer found in the wild in Canada but exist elsewhere in the world.

——— **Extinct** – species that no longer exist.

Source: Canadian Biodiversity Strategy, 1995

Environment Canada's response: *Environment Canada feels that a good deal of progress has been made in the implementation of the* Convention on Biological Diversity *in Canada, but we acknowledge that more progress is, and will be, needed in the future. The complexity of this issue, both scientifically and jurisdictionally, requires a national commitment to the conservation and sustainable use of biodiversity in Canada.*

The scientific knowledge to understand the complex interrelationships among species and to make appropriate decisions needs to be significantly enhanced. Added to the scientific complexity of conserving biodiversity are the interjurisdictional complexities. Notwithstanding these challenges, an important foundation for the implementation of the Convention on Biological Diversity *has been laid in Canada through the Canadian Biodiversity Strategy. Not only has it generated broadly based commitment among governments and non-government stakeholders, it has created a planning framework that is being applied to new and existing federal, provincial, industry and community plans and decisions.*

Our goal, in concert with our partners, will be to continue efforts to refine results and develop a performance measurement framework and biodiversity indicators that are practical, meaningful, scientifically defensible and compatible with regional, provincial, national and international programs.

Natural Resources Canada's response: *The Commissioner of the Environment and Sustainable Development is to be commended for raising important issues regarding what is needed to make the implementation of the Canadian Biodiversity Strategy more effective. Some of the criticisms contained in the report are justified. Natural Resources Canada accords a high priority to enhancing scientific knowledge about biodiversity and agrees that there is a need for better interdepartmental and federal-provincial co-ordination of this issue.*

The report rightly indicates that the forestry module lacks time frames, resource allocations, performance indicators and, to a large extent, expected results. However, biodiversity pervades most of the business plans of the Canadian Forest Service's 10 science and technology networks. As well, it is a priority in Natural Resources Canada's sustainable development strategy and in the Canadian Forest Service's Strategic Plan. It is expected that, with the performance evaluation frameworks being finalized for each of these networks, the Canadian Forest Service will be able to demonstrate progress toward these and other objectives.

In addition, Canada is reporting on its framework of criteria and indicators for sustainable forest management, which contains indicators of biodiversity. Improvements are needed in these indicators and their measurement. Even so, progress has been made in this area.

Agriculture and Agri-Food Canada's response: *Agriculture and Agri-Food Canada shares the Commissioner's commitment to implementing the requirements of the* United Nations Convention on Biological Diversity *and the Canadian Biodiversity Strategy. That is why the Department took leadership as one of the first departments to complete a biodiversity action plan. The action plan, which has been well received by stakeholders, including the agricultural and agri-food sector and environmental groups, outlines the issues surrounding the protection of biodiversity and the actions being taken to address them. Several departmental initiatives respond to items identified by the Commissioner, including scientific research, the development of agri-environmental indicators to measure progress, and the integration of the Department's efforts with the*

contributions of other departments as they finalize their respective action plans.

The agriculture and agri-food sector has undergone considerable change over the last 25 years and a better understanding is now emerging of how agriculture and biodiversity can be managed for mutual benefit. The agricultural community is working hard to maintain economically viable levels of crop and animal production in a manner that conserves biodiversity resources. For example, important biodiversity gains are being achieved through higher yields on the more productive croplands, which has resulted in less intensive use of marginal agricultural lands and the preservation of non-agricultural lands.

Further biodiversity initiatives under way can be found in two companion documents to the Department's biodiversity action plan, entitled "Biodiversity Initiatives — Agriculture and Agri-Food Canada" and "Biodiversity Initiatives — Canadian Agriculture Producers".

About the Audit

Objective

To assess the progress made by the federal government in implementing the requirements of the *United Nations Convention on Biological Diversity* and the Canadian Biodiversity Strategy.

Scope

The audit examined the commitments and obligations of the federal government to the *Convention on Biological Diversity* and the implementation of the Canadian Biodiversity Strategy. We examined the progress made by several key federal entities in implementing the Strategy and assessed whether information needed to operationalize and fully implement the Strategy was being reported to the United Nations Secretariat.

We focussed our work on the efforts of Environment Canada (Biodiversity Convention Office) and the federal biodiversity action plans or "planning modules" that have been completed to date. In order to gain insight into how departments are implementing the Canadian Biodiversity Strategy, we reviewed, in detail, the planning module of one department, Agriculture and Agri-Food Canada.

Approach

The audit approach consisted of a review of documentation, and interviews with a wide range of stakeholders including federal departmental officials and experts from other sectors. We began by comparing the current status of implementation against the expectations laid out by the government in its own planning documents.

Criteria

We expected that the federal government would have:

- met its commitments with respect to the *Convention on Biological Diversity*, that is, the development of the Canadian Biodiversity Strategy;
- consulted with and solicited input from all principal stakeholders during the development and implementation of the Strategy;
- developed a federal action plan for implementing the Strategy, which would include time frames, resources to be allocated, expected results and performance indicators;
- met deadlines for key deliverables; and
- established measurable targets and time frames for reporting on the results of its efforts in accordance with the requirements and guidelines of the *Convention on Biological Diversity.*

Audit Team

Principals: Wayne Cluskey and Neil Maxwell
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Ginger Stones

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Appendix

Agriculture and Biodiversity

In November 1997, Agriculture and Agri-Food Canada, with the Canadian Food Inspection Agency, produced its biodiversity action plan. The plan is also a component of the Department's sustainable development strategy. The Department should be commended for its efforts as one of the first federal departments to implement the Canadian Biodiversity Strategy.

The environment provides many of the inputs required for agricultural production, such as water, energy, nutrients, soil and biodiversity resources. Agriculture in Canada depends on and interacts with biodiversity at the genetic, species and ecosystem levels; in the past, this interaction has tended to adversely affect natural biodiversity. Agricultural producers use a variety of techniques to control other species that challenge the food supply (including genetics, pesticides, herbicides, tillage and biocontrol methods). Figures 1 and 2 show that regions with a high degree of risk to natural biodiversity, as assessed by Environment Canada, are strongly related to human uses of the landscape, notably agriculture, transportation corridors and urbanization.

To grow crops for the first time, lands are cleared and transformed into farmland, a process that, over time, has fundamentally altered, and in many cases eliminated, natural landscapes and ecosystems. For example, on the prairies, where about 85 percent of Canada's agricultural land is found, it is estimated that only about 1 percent of original tall-grass prairie, 24 percent of mixed-grass prairie and 5 percent of fescue prairie remain.

Important land use changes have also occurred within the agricultural land base. In response to market pressure, agriculture has become more intensive on the most productive lands, which increases risks to biodiversity on cropland. It is important to note, however, that although the annual value of agriculture output (measured in constant dollars) has increased by about 64 percent since 1971, Statistics Canada indicates this productivity has been achieved without significantly encroaching on non-agricultural land such as wildlife habitat and other marginal lands not well suited to food production (total farmland in production has actually decreased by one percent since 1971).

Because of consumer demand and market pressures, agricultural production is limited to a small number of domesticated species of crops and animals. For example, estimates indicate that, on a global basis, three crops (wheat, rice and maize) provide about 60 percent of the calories and 56 percent of the protein that humans consume directly from plants. In addition, only a small number of animals have been domesticated and



Figure 1: Regions with a high risk to natural biodiversity in Canada

(**Source:** Environment Canada)



Figure 2: Agricultural lands in Canada

(**Source:** Agriculture and Agri-Food Canada)

selective breeding for increased productivity and uniformity has narrowed the genetic base of domesticated animals, plants and micro-organisms that are used in agriculture and agri-food production. For example, almost all of Canada's dairy cattle are Holsteins and 80 percent of all Holsteins at major artificial insemination centres descended from just 20 sires. With reliance on a small number of genetically less diverse species, there is a greater risk of production failure from pest and disease attack.

The Department and the agriculture and agri-food sector are endeavouring to preserve genetic diversity and the parent stocks of today's high-yield crops through the collection of seeds and storage in gene banks, but this process is logistically more difficult with animals. The preservation of animal stocks requires a careful combination of the use of modern biotechnology and maintenance of parent stocks in herds or flocks of rare breeds that may have no direct commercial value.

A better understanding is now emerging of how agriculture and biodiversity can be managed for mutual benefit, and numerous initiatives are under way in both the Department and the agriculture and agri-food sector. For example, many producers delay grazing and haying practices to provide ground cover for young, vulnerable wildlife. The Department has taken advantage of this emerging awareness to produce its action plan. The following is a review of the development of the plan.

The action plan

The challenge for Agriculture and Agri-Food Canada was to produce a biodiversity action plan that recognized its partnerships, was sensitive to its clientele, and balanced environmental and economic considerations. Key partners for the Department are the provinces, which constitutionally share jurisdiction over agriculture and have regulatory authority over land use.

The Department's experience suggests a number of lessons of value to other departments:

- **Having stakeholders work together is key.** The action plan was based on a long history of both the Department and the sector working on biodiversity issues. The actual product was the result of consultations with environmentalists, producers and provincial officials as well as other federal departments, which began in 1996.
- **Find motivated people to work on the plan.** An interbranch committee, chaired by the Department's Environment Bureau, was responsible for producing the plan. The committee's members typically had a prior interest in biodiversity, which contributed to the committee's success.
- **The plan can be produced with limited resources.** We found it difficult to determine the exact resources used to develop the plan, but it likely required about five person-years annually over two years.
- **Align the plan with ongoing initiatives.** The action plan sets four goals: to promote sustainability, to increase awareness, to conserve and provide access to genetic resources and knowledge, and to integrate biodiversity conservation objectives into departmental policies and programs. Approximately one third of the actions outlined in the plan require new efforts by the Department. The balance are a continuation of past biodiversity-related initiatives. Many of these actions support the sector and pursue biodiversity issues at the same time — for example, Research Branch plans to explore biodiversity to identify crops with improved genetic resistance to disease, and to research alternative crops to help diversify the sector.

The Department has completed a biodiversity action plan that attempts to take into account the departmental context and the concerns of stakeholders. The plan addresses ways that the agriculture and agri-food sector can take advantage of biodiversity and become more aware of related issues. It defines a facilitative, informational and supportive role for the Department — an approach that the Department sees as critical to achieving success.

The way ahead

Agriculture and Agri-Food Canada's biodiversity action plan raises or is silent on a number of issues that, in our view, need to be addressed by either the Department or the Biodiversity Convention Office. These issues may also provide useful lessons to other departments that are developing biodiversity plans.

- **There is a need for information to show time frames, expected results, performance indicators, and how many resources the Department is devoting to biodiversity.** Words such as "encourage" and "promote" are used in the plan to describe what is going to take place, but little indication of the level and timing of effort or expected results is given. A lack of cost information for the plan will limit the ability to decide which action steps have not been cost-effective and which steps might deserve increased resources in the future. Without a cost estimate of the planned initiatives, the Department also runs a risk that planned initiatives may outstrip its available resources.

- **More scientific information is needed to support the action steps outlined in the plan.** This need comes at a time when government is enduring significant cutbacks. Due to fiscal restraint, there is no ready solution to this need; however, the continuing lack of scientific information will affect the action plan. The more complete our knowledge about agricultural biodiversity becomes, the better able the sector will be to improve the quality of soils, crops and agricultural ecosystems.

- **Indicators of domesticated diversity are needed.** While the Department is developing an indicator for wildlife diversity on agricultural lands, it also needs indicators of domesticated diversity. Some of the steps in the Department's action plan pertain directly to efforts to diversify domesticated plants and animals. In addition, the long-term economic security of the sector depends in part on having a range of products. The Department needs to develop indicators of diversification in the sector at all levels of biodiversity: the genetic, the species, and the agricultural ecosystem.

- **There is a need to assess and integrate Agriculture and Agri-Food Canada's biodiversity action plan into the plans of other departments and the Canadian Biodiversity Strategy.** In the past, the Department has considered itself the voice of the sector and has been concerned that other departments might have objectives that could be detrimental to the needs of the sector. Given this strong point of view, there now needs to be a process to ensure that the Department's plans are complementary to the objectives of other federal departments and that the overall requirements of the Canadian Biodiversity Strategy are met. The Department's biodiversity plan also recognizes this need.

In conclusion, the Department has produced, with limited resources, an action plan that lays out ways that the agriculture and agri-food sector can take advantage of biodiversity, while helping the sector to become more aware of biodiversity issues and conservation. However, the Department, along with other federal departments, the sector and the Biodiversity Convention Office, must still resolve a number of key challenges.

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – 1998

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1998

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Chapter 5

Expanding Horizons — A Strategic Approach to Sustainable Development

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Expanding Horizons — A Strategic Approach to Sustainable Development

Main Points

5.1 The pursuit of sustainable development can be understood as a journey. Guided by a need for better decision making, this journey is an exploration of new ways of thinking and acting that emerge as we integrate economic, environmental and social perspectives. This chapter presents a description of sustainable development management, its stages and some key characteristics.

5.2 We studied a number of organizations noted for their progress toward sustainable development. In responding to its challenges, these organizations illustrate a common approach to developing strategy.

5.3 In a number of ways, this approach differs from traditional strategy development. It requires a broader perspective, which expands the time horizons, the field of contributors and the range of options considered in decision making. It articulates a long-term vision of where the organization wants to go and clearly enunciates the values and principles that will guide it on the way.

5.4 Effective sustainable development strategies also involve the application of sound management practices. Education and communication build commitment and capability throughout the organization. Clear and measurable objectives, goals and targets are identified to move the organization toward its vision. Processes and procedures are monitored and reviewed to allow the organization to assess progress and make modifications where necessary.

5.5 In this chapter, we identify a number of tools common to the organizations we studied — tools that support the organizations in their progress toward sustainable development. These tools include scenario building, the use of collaborative and advisory structures, and a life cycle management approach to policies, products and operations.

5.6 The organizations we studied have realized many opportunities and benefits inherent in the pursuit of sustainable development. Federal departments and agencies can learn from these and other examples as they develop and implement their own sustainable development strategies.

Introduction

The Pressure for Change

5.7 Organizations in both the private and public sectors are under mounting pressure to improve their environmental performance and to contribute to sustainable development. Their challenge is to better integrate environmental and social considerations into their decision making, alongside economic considerations. An early focus on comparatively simple environmental issues has evolved into the complex responsibility of sustainable development.

5.8 Private sector organizations face pressure from many sources, whether governments, markets, environmental groups, or their own employees. Government regulation of processes and products is becoming increasingly stringent in some parts of the world. Customers are demanding enhanced environmental protection; at the same time, they are requiring the same or increased economic benefits from products and services. For many companies, the environmental characteristics and impacts of their products often differentiate one corporate brand from another. Public concern over environmental and health issues is creating pressure on companies to assume more responsibility for product stewardship, including product recycling. The globalization of the economy pushes organizations to address global issues such as climate change, and to accept greater social responsibility when operating in emerging economies.

5.9 Public sector organizations are also feeling the pressure to respond to public concern over environmental and health issues. Governments around the world are confronted with the responsibility of global issues such as ozone depletion and climate change. At the same time, they need to address specific domestic environmental problems and to ensure that environmental and social policies produce desired results. And they need to put their own house in order in terms of the environmental performance of their operations.

Focus of This Study

5.10 The 1995 *Guide to Green Government* presented a framework to help federal departments and agencies prepare their sustainable development strategies. It explored tools and issues to consider as they developed and implemented their strategies. The present study seeks to provide additional information for departments. We have surveyed over 60 recognized experts from around the globe, reviewed the literature and considered the efforts of a variety of organizations, and we have conducted seven detailed case studies.

5.11 As we studied organizations recognized for their successful efforts, we asked two questions about their approach to sustainable development strategy: What activities were involved in its development and implementation? What tools, approaches and factors have contributed to its success?

5.12 We recognize that sustainable development will vary in practice among organizations, regions and countries. However, we believe there are lessons to be learned from studying effective management responses to the need for more sustainable practices and policies.

5.13 The chapter refers to case studies of seven organizations drawn from both the private and public sectors. They are: Nortel; SJ Rail of Sweden; Sony; TransAlta; Germany's Center of Technology Assessment; the Netherlands National Environmental Policy Plan; and Volvo. These organizations are diverse in nature, whether in their operations or in their policy mandates. Also diverse are their previous environmental practices and the pressures that moved them to address sustainable development. Generally, they

Private and public sector organizations are under mounting pressure to contribute to sustainable development.

Lessons can be learned from the management approaches of leading organizations.

The road toward sustainable development is inevitably a search for new ways of thinking and acting.

are large and complex organizations that are broadening their thinking and their acting in response to the challenge of sustainable development. The organizations, the pressures moving them to address sustainable development and their approaches to it are outlined in the insert on page 5–10.

Study Findings

The Sustainable Development Journey

5.14 No organization — in Canada or around the globe — has a definitive view of what a sustainable development strategy should contain. No organization knows precisely what the road to sustainable development looks like. However, travellers moving toward sustainable development do identify one essential prerequisite: an articulated commitment to continuous learning, improvement and innovation.

5.15 Indeed, the road toward sustainable development is inevitably a search for new ways of thinking and acting. It is a process of change that is focussed on better integrating environmental, economic and social considerations into decision making. This approach itself could be stated as an underlying tenet of government for a modern society.

5.16 Sustainable development is not a single destination, but the context for this journey. It guides an organization in the continuous redefinition of its goals. Also, it guides a process of expanding the inputs to decision making that supports the definition of those goals and the means to achieve them. In searching for new ways of thinking and acting, sustainable

Exhibit 5.1

The Journey Toward Sustainable Development

Characteristics	Coping	Compliance	Comprehensive Environmental Management	Pursuit of Sustainable Development
Values/Motivations	Short-term Profit	Legal	Business/Ecological	Sustainability
Objectives	Survival	Minimize Liabilities	Build Competitive Advantage	Economic, Social and Ecological Success
Strategic Approach	Defend the Status quo	Minimize Change	Significant Change	Redefine Purpose of the Organization
Management Focus	Crisis Management	Regulatory Due Diligence	Build Business Strategy	Knowledge/ Relationship Development
Stakeholder Mode	Avoidance	Minimize Contact	Engagement	Learn from and Innovate
Communication Focus	None or Defensive	Regulatory Filings	Life Cycle Impacts	Comprehensive and Transparent

development can best be understood as a journey that involves strategic choices.

Strategic choices along the way

5.17 The strategic choices represent points on a continuum of organizational responses to economic, environmental and social issues (see Exhibit 5.1). In the private sector, there has been a sea change in thinking about the relationship between shareholder value and the environment.

5.18 Thirty years ago, many companies were in a state of denial about their impact on the environment. Companies were simply **coping**: responding to specific environmental problems or "incidents" as they occurred. They implemented "damage control" strategies. Government action to protect the environment was seen to be bad for business, and to be resisted. Only in exceptional cases would one find voluntary action by business.

5.19 As government regulation of environmental impacts increased, companies and their officers became concerned about their exposure to prosecution and financial liability. This motivated many organizations to adopt systems and procedures to ensure **compliance** with existing laws and regulations. These strategies often led to "end of pipe" solutions to environmental impacts. The expense of developing solutions to meet regulatory requirements was seen as a cost of doing business; the objective was to minimize that cost.

5.20 As companies search for ways to reduce these costs, many have begun to identify opportunities to protect the environment that are also good for the bottom line. They apply lessons learned from the management of safety and quality. They develop **comprehensive approaches to environmental management**, embodying pollution prevention and eco-efficiency within a framework for managing the risks attached to environmental and social issues. In doing so, they achieve significant risk and cost reductions. As companies focus their attention upstream in their operations, many find they are identifying new opportunities to generate revenue, business opportunities for environmentally friendly products and marketable solutions to some of the world's environmental problems.

5.21 A small but growing number of companies go beyond comprehensive environmental management to integrate **sustainable development** considerations into their corporate strategies. They expand their decision-making horizons by linking financial stewardship with environmental stewardship and social stewardship. Changes are made to fundamental business processes to eliminate or greatly reduce the risks to be managed. Innovations are incorporated so that the examples of positive organizational environmental impact increase. The discipline of listening to the concerns of a broadly defined group of stakeholders is embedded in formal processes and practices.

5.22 In moving toward environmental stewardship, such companies take a life cycle management approach to their products and operations. The objective is to maximize the value of the products created while minimizing the use of resources and the generation of wastes. Social stewardship is proving to be a more complex challenge. Companies are just beginning to grapple with issues such as operating in industrializing countries and the impacts of their operations and technologies in an increasingly global and interdependent economy.

The federal government's path

5.23 In Canada, the federal government has followed a related path, at some times driving action in the private sector through its policy-making role, and at other times playing catch-up with practices that have taken root elsewhere.

The federal government has at times driven action in the private sector and at other times played catch-up with private sector practices.

5.24 **Environmental protection** was the focus in the 1970s. The Department of Environment was formed in 1971 to be the focal point in the Government of Canada for environmental protection. Key pieces of legislation were introduced, including amendments to the *Fisheries Act* (1970), the *Canada Water Act* (1970) and the *Clean Air Act* (1971).

5.25 In the early 1980s, **environmental assessment of projects** began with the Environmental Assessment and Review Process (EARP). This became more formal in the mid-1980s with the issuance of an EARP Guidelines Order. The Order provided for the assessment of environmental impacts of projects in which the federal government was involved. Then, in 1988, the *Canadian Environmental Protection Act (CEPA)* was proclaimed. It provided authority to make environmental protection regulations that apply to federal works, lands and undertakings.

5.26 **Environmental management** began in the 1980s. In 1986 the

THE CASE STUDIES:
THE ORGANIZATIONS, THEIR MOTIVATIONS, AND THEIR APPROACHES

SJ Rail

SJ Rail is the traffic operator, building owner and service provider of the Swedish national railway. Following a substantial downsizing, the organization has 11,000 employees and generates revenues in excess of US$2.5 billion. It is the most productive national rail company in Europe.

The challenge for SJ Rail was to rebuild an inefficient, money-losing, bureaucratic railway that was failing on almost every measure of quality, customer service and employee morale. Driven by a need to regain public and financial credibility, SJ Rail articulated sustainable development as the core platform for its turnaround — a definition of sustainability that included not only environmental considerations but social considerations for SJ as an organization, and a role for SJ in sustaining the societal and environmental health, as well as the international competitiveness, of Sweden as a nation.

TransAlta Corporation

TransAlta Corporation is an Alberta-based utility that owns and operates thermal and hydroelectric power plants, and electric transmission and distribution systems servicing 1.7 million people. It operates in two Canadian provinces and in three countries outside North America.

TransAlta has a history of being proactive on environmental issues. As part of the company's pursuit of sustainable development, it is focussing on eco-efficiency: producing greater value with fewer resources while reducing environmental impact. At the same time, TransAlta faces a difficult strategic dilemma, as the mainstay of its current business is its coal-fired generation plants, which have significant greenhouse gas emissions. TransAlta is on track to achieve its planned progress in reducing net greenhouse gas emissions; it is expanding its electricity generation business with high-efficiency natural-gas-fired cogeneration facilities. TransAlta is also providing services to reduce the demand for electricity and is examining other innovative ways to meet the challenge of sustainable development.

Volvo

Volvo is the largest industrial group in Scandinavia, with over 70,000 employees and 55 production plants in 26 countries. Sales in 1996 were US$20.4 billion, 90 percent of which were outside Sweden, primarily in Western Europe and North America. The Volvo Group's products include cars, large trucks, buses, aircraft engines, construction equipment and drive systems for marine and industrial applications.

Volvo was under pressure from customers to reduce the environmental impact of its products. The transportation industry was facing increasingly rigorous legislative standards for emissions, recycling, waste handling, reduction of noise and traffic congestion, and packaging. Volvo's response was not to abandon its core business; instead it has challenged itself to discover and develop "Sustainable Mobility". Volvo sees sustainable mobility as a critical component of achieving sustainable industry, a subset of a broader goal to achieve a sustainable society.



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Department of National Defence undertook baseline studies of its facilities; in 1989 Transport Canada developed environmental management plans for its airports. During the 1990s, many departments have been developing environmental management systems.

5.27 In 1990, Canada's Green Plan established a policy and program framework for protecting the environment within the context of sustainable development. It introduced the concept of **environmental stewardship** to federal departments and agencies, who subsequently began a review of the environmental implications of existing statutes, policies and programs.

5.28 In 1997, for the first time, departments and agencies were required to prepare **sustainable development** strategies. (A report on these strategies can be found in Chapter 1.) During the next phase, the Commissioner of the Environment and Sustainable Development will monitor the implementation of these strategies and evaluate their effectiveness.

Characteristics of the journey

5.29 **Our understanding of the sustainable development journey is evolving.** Ten years ago, the challenge was conceived as stages of environmental management. There was limited reference to the ongoing process of "sustainable development". Today, sustainable

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THE CASE STUDIES: THE ORGANIZATIONS, THEIR MOTIVATIONS, AND THEIR APPROACHES

The Netherlands National Environmental Policy Plan

The Netherlands National Environmental Policy Plan is the responsibility of four federal ministries (Economic Affairs; the Ministry of Transport and Public Works; the Ministry of Agriculture, Nature Protection and Fisheries; and the Ministry for Housing, Spatial Planning and the Environment). The Netherlands is a small, densely populated (approximately 15 million) and highly urbanized country with a gross national product of approximately US$350 billion.

In the Netherlands, environmental policy was focussed on the management of toxic substances and the sectoral regulation of processes that posed a threat to human health. Scientific and policy analysis indicated that this approach was failing because it did not slow environmental degradation; solutions developed for one problem often caused other environmental problems; it was administratively burdensome; and it led to contradictory policies that were inefficient and costly. In the mid- to late 1980s, the situation was complicated when a number of high-profile environmental incidents focussed the country's attention on environmental issues. The result was the development of the National Environmental Policy Plan (NEPP). The NEPP is described as a national strategy for the environment that has the ambitious goal of "achieving sustainable development in the Netherlands within one generation". NEPP sets out a strategic environmental management approach that provides a vision, identifies problems, sets objectives and targets, identifies roles and responsibilities, and outlines how progress will be monitored.

The Center of Technology Assessment

The Center of Technology Assessment is a public foundation created by the German state of Baden–Wurttemberg along with the state of Bavaria. Home to ten million people, Baden–Wurttemberg is the third-largest state in Germany and consistently ranks as the nation's economic leader.

The Center of Technology Assessment has been charged with, among other tasks, designing the public process through which sustainable development can be both conceptualized and made practical for the states of Baden–Wurttemberg and Bavaria.



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development receives increasing attention whereas "coping" is no longer mentioned as a reasonable option.

5.30 The choices are not separate or isolated. Organizations find themselves addressing many environmental, social and economic options at the same time. It is not uncommon that, as they work to ensure compliance, they are also developing an environmental management system and exploring the broader implications of sustainable development.

5.31 For example, Volvo is working to establish an environmental management system in 40 of its units by 1998. It is integrating life cycle assessment as a decision-making tool in at least 10 development projects within the next year. It has also challenged itself to define and develop "Sustainable Mobility" as a way to fulfil the transportation requirements of people and goods through transportation systems that are simultaneously safe, secure, environmentally acceptable, cost-efficient and user-focussed.

5.32 Organizations do not necessarily move along the continuum sequentially. They simultaneously respond to competitive pressures, technological change, regulatory requirements, customer demands, shifting social values, and strong leadership and foresight.

5.33 SJ Rail's vision, from the outset of its 1988 reform plan, was to create a sustainable passenger and freight rail transport system. SJ developed its vision

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THE CASE STUDIES:
THE ORGANIZATIONS, THEIR MOTIVATIONS, AND THEIR APPROACHES

Nortel

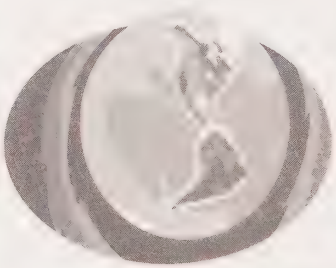
Nortel (Northern Telecom) is a leading global provider of integrated network solutions, with 1997 consolidated revenues of US$15.45 billion. It is headquartered in Brampton, Ontario and operates in over 150 countries, with approximately 73,000 employees.

Nortel has recently started developing its strategic thinking for implementing sustainable development. The company has followed a steady progression from compliance-driven environmental activity to an environmental management systems approach, to the current situation in which sustainability and social responsibility are seen as essential components of the company's strategic planning. Nortel is responding to increased market demand (from customers and in the form of environmental management systems standards), increased legislation (in the form of product take-back regulations) and globalization of the economy (requiring global companies to tackle global issues such as sustainable development).

Sony

Sony is one of the world's foremost companies in the areas of consumer and industrial electronics and entertainment. It is a leader in the development of new technologies, with 1997 sales of US$45.6 billion and 163,000 employees worldwide.

Sony and the electronics industry in general are experiencing a number of forces moving them toward more sustainable industrial practices: market pressures toward recycling and ecolabeling; legislative requirements governing materials handling, emissions and product take-back; increasing resource use and disposal costs; and competitive pressures. Sony has a long history of systematic endeavours to advance environmental performance. Today, Sony has a worldwide organizational infrastructure based on tried and true managerial systems to achieve environmental goals: driving, co-ordinating and, most important, disseminating learning from environmental improvement efforts; leadership prioritization; clear targets for improvements; research and development focus; educational programs; an Environmental Award program; data management systems; and extensive involvement and leadership within industry and government networks.



of sustainability as the organizational focus for its own business turnaround, and as the basis for a new rail system that could be a key player in preserving both environmental health and the "sustainability" of Sweden's national competitiveness.

5.34 **Organizations that do evolve from one stage to another tend to move their focus from cost to innovation and renewal.** Initially, companies may try to reduce costs. Then they manage the risks and seek continuous improvement in productivity and efficiency. In some cases, they break through to higher levels of performance through innovation and organizational renewal.

5.35 Nortel's CFC (chlorofluorocarbon) experience was instrumental in moving the company beyond compliance and into a proactive environmental approach. This had clear business value: it enhanced the company's brand image, establishing Nortel's international profile as a leader in environmental management. One of the key lessons learned in the elimination of CFCs was that opening up the manufacturing process and looking at the entire supply chain (raw material, production processes, product use, and waste management issues) can result in unanticipated benefits.

5.36 **Organizations realize the benefits of understanding the interrelatedness of systems.** The evolution toward sustainable development moves the focus from operations to products or services in relation to broader social and environmental impacts, constraints and needs. Many companies shift their thinking from supplying products to providing the services inherent in the products.

5.37 We found an interesting example of this shift at Interface Flooring, a rapidly expanding American corporation. Its "Evergreen" program provides the customer with the services of flooring (acoustical and aesthetic properties) while Interface retains ownership and stewardship of the product, from manufacture to removal and ultimate recycling into a new product.

5.38 TransAlta and other electrical utilities are providing demand-side management services. These services help customers to reduce the demand for electricity. As production requirements are reduced, so too are potentially negative environmental effects.

5.39 In policy-based public sector organizations, concern about impacts of specific activities (for example, waste generation) has evolved toward more integrated broad policy themes.

5.40 The Netherlands National Environmental Policy Plan, NEPP, has the ambitious goal of "achieving Sustainable Development in the Netherlands within one generation". It has shifted its emphasis from environmental media (air, land and water) and industrial sectors to key "themes" such as resource management, acidification, hazardous substances and climate change. Target groups have been given responsibility for the development of solutions. In addition, policy makers began to think about solutions in terms of measures directed at the sources or causes of pollution, and measures directed at improving environmental quality.

Comparing Strategies: Lessons Learned

Broaden the strategy development process

5.41 The organizations we have studied provide a clear picture of a successful journey toward sustainable development. At the highest level, these organizations develop an approach to strategy that involves creating a **vision** supported by a management system that **plans, organizes, implements, reviews and monitors progress**. They integrate longer decision-making timelines, more comprehensive stakeholder involvement,

Organizations that make progress along the journey move their focus from cost to innovation and renewal.

education and communication, goal-setting, and monitoring and reporting on performance.

A vision is developed of what sustainable development means for the organization, as a framework to stimulate action.

5.42 These organizations broaden the time horizons, the field of contributors and the range of options they consider in their decision making. They develop a vision of what sustainable development means for the organization. This includes defining their long-term goals and identifying the values and principles of sustainable development that they will follow.

5.43 Vision is much more than a "big goal" or an "idealized picture of the future". It is a common context for action developed by the organization. It provides a framework and guidelines to stimulate action. Having such a shared mental model is a precursor to making progress toward sustainable development. While the original objective might be to define what sustainable development means, senior managers discover that the discussion broadens the question and the articulation of what they do as an organization.

5.44 The Center of Technology Assessment (CTA) is a public foundation created to guide the German industrial state of Baden–Wurttemberg toward sustainable development. The Center pursues five major steps that are linked to specific policy tools to help facilitate their implementation. These are:

- to construct a working definition of sustainable development;
- to identify the principles that underlie this definition and how to translate them into action;
- to address the notion of growth within the context of sustainable development;
- to describe how sustainability will be implemented for the region; and
- to develop operational principles to provide practical guidance to move the region toward sustainability.

5.45 Organizations develop new associations, alliances and forums where driving factors toward sustainable development and alternative responses are explored. Managers at the most senior levels demonstrate their commitment through participation.

5.46 Nortel is considering the relationship between the telecommunications industry and social responsibility in industrializing countries (in particular, their impact on education, health care and economic development).

5.47 In Volvo, we see the question "What is our objective?" move from an operational notion (such as the elimination of CFCs and toxins from manufacturing) to a strategic one: "What **should** be our objective?" (such as to develop recyclable cars, develop efficient vehicles or transportation systems, or discover and develop "Sustainable Mobility")

Use scenarios to build resilient strategies

5.48 Scenario building is a major tool for broadening decision making. Scenarios are stories of possible situations that blend data and analysis with intuition and creativity. These stories must be internally consistent and stretch the imagination without losing credibility.

5.49 Traditional planning, in contrast to scenario building, is more closely linked with forecasting. Forecasters extrapolate from the past, projecting the patterns they see onto the future. Forecasts are thereby exposed to risks from highly likely but unforeseeable changes in those patterns.

Scenarios address the longer time frames and broader array of inputs required to develop sustainable development strategies.

5.50 Scenarios address the longer time frames and broader array of inputs required to develop sustainable development strategies. Organizations use scenarios to assess the resilience of strategic choices, given a variety of possible futures. Many debates about sustainable development issues focus on the risks attached to the lack of available

information and to unpredictable consequences. As decision makers test different mental models, scenarios help to counter the usual tendency to interpret new information using old beliefs.

5.51 Scenario building influences the development of new mental maps. As participants identify threats, opportunities, or new options, the "strategic conversation" is wide-ranging. It generally triggers a planning process, which begins with an assessment of existing plans, measured against possible outcomes and new proposed actions. The framework for decision making becomes more robust.

5.52 There are many successful examples of the application of scenario building. Over 30 members of the World Business Council for Sustainable Development recently completed a Global Scenario Project. The objective is to help the participants consider a number of plausible routes toward sustainability and explore their impact on business.

5.53 The Netherlands developed emissions and costs scenarios, to understand the reductions in emissions/discharges needed to achieve sustainable levels. In one particular case, the scenarios demonstrated potential GDP growth over alternative, more traditional economic policies. This work contributed to the strategic planning stage that laid the foundation of the first National Environmental Policy Plan.

5.54 The European Commission has an advisory body to consider potential scenarios for a sustainable Europe in the year 2020. This work has five objectives:

- to test and provoke thinking about sustainability;
- to help the European Commission develop its vision for a sustainable Europe;
- to challenge policy makers and various stakeholders to develop a more future-oriented approach to environmental policy;
- to communicate to a wider audience the complexity and interdependencies involved in achieving a sustainable Europe; and
- to provoke further thought on new ways of proceeding.

5.55 As part of its examination of Sustainable Mobility, Volvo developed "Global Emissions Scenarios" by calculating estimated global emissions over a 30-year period, based on differing levels of improvement in fuel efficiency and different rates of traffic growth.

Bring the outside in: tap external knowledge

5.56 In the increasingly complex context of decision making, organizations cannot be expected to possess among their own human resources all the knowledge necessary to respond to novel demands. In the organizations we studied, senior managers listen to external stakeholders and experts and use collaborative and advisory structures. For The Dow Chemical Company, its Corporate Environmental Advisory Council of external experts provides independent advice on the company's environmental performance.

Collaborative and advisory groups of external stakeholders and experts contribute to organizational learning and innovation.

5.57 Organizations that tap into the wealth of the knowledge base external to their organizations reap many benefits:

- new perspectives;
- the opportunity to identify concerns, potential threats and opportunities articulated by key stakeholders;
- the ability to identify trends in expert opinion and public sentiment that can influence the future of the organization; and
- increased learning within the organization, which is vital to innovation.

5.58 The Center of Technology Assessment is structured with a Board of

Senior management support signals the commitment of the organization.

Trustees and a 26-member Advisory Committee. The Advisory Committee includes representatives from the legislature, government, universities, labour, industry, religious and environmental organizations. Citizen Panels involving upward of 250 people are used for resolving difficult environmental, economic and social issues.

5.59 TransAlta invites customers and representatives of environmental groups to comment on major projects of the company. In the past, these groups have identified service delivery solutions that reduced environmental impacts and lowered costs to the organization.

Build commitment and capability

5.60 Building commitment and capability within the organization begins to translate planning into action. This requires involving personnel at all levels of the organization and using a variety of tools to lever change. Commitment involves establishing the relationships and accountabilities for the sustainable development strategy, beginning with senior management. New capabilities require education and training programs for all levels of management and personnel. A communication program reinforces the organization's commitment and education efforts.

5.61 **Senior management is key.** All environmental management system models underline the need for senior management buy-in and support. Pursuing sustainable development makes such commitment even more critical to support the organizational change needed. Senior management support signals the commitment of the organization. It provides a focal point for communicating and reinforcing the strategic choices. In our case studies, we observed the commitment of the chief executive officer, minister or board of directors through active involvement as developers and champions of the organization's sustainable development strategy.

5.62 In private sector organizations, this is reinforced by a senior officer with direct accountability for environment and the sustainable development strategy. In both TransAlta and Nortel, this accountability rests with a vice-president. This senior officer is generally accountable for ensuring the successful development and implementation of the environment and sustainable development strategy and the supporting management systems.

5.63 **Involve and build support throughout the organization.** Achieving progress on the journey toward sustainable development requires that personnel throughout the organization be involved and actively support the change effort. Added benefits flow from tapping the creative potential of staff in the search for innovation at all levels of the organization. This can be accomplished in many ways, which include:

- encouraging and implementing employee support and initiatives from the bottom up;
- building sustainable development criteria into reward, promotion and incentive systems for all personnel;
- establishing organizational structures and relationships that align the organization with the sustainable development strategy.

5.64 Sony has a worldwide organizational structure, consisting of four regional Environmental Conservation Committees and a head office function, to champion, co-ordinate, and disseminate learning from environmental improvement efforts initiated throughout the organization. Each Committee sponsors an annual Environmental Conference as a forum for information exchange, progress review, planning and recognition.

5.65 TransAlta uses a central Sustainable Development function to champion its strategy. Individuals from

the various business units have been brought into the corporate group for training and engagement in the strategy. When they return to their business units, they take with them enhanced awareness of the strategy and become its champions within their units.

5.66 At SJ Rail, the sustainable development strategy was developed with the active participation of the employee union. Members of the union were appointed to the organization's Board of Directors and were partners in a joint program to improve efficiency and increase employee morale. Financial information was shared with the union to engage it in helping to solve the problems and move the organization toward its vision of sustainable rail transport. Middle-level managers and supervisors were supported with development programs. A five-day management training program was provided in support of the new, more inclusive and collaborative management style.

Educate to build knowledge

5.67 In all our case studies, the organizations recognized that change cannot occur without an investment in sensitivity, awareness and knowledge among all personnel and key partners. The ability to integrate sustainable development into organizational thinking is a core competency in organizations that are successful in their pursuit of sustainable development.

5.68 Through education and training, organizations build an understanding of the issues, identify principles, establish conceptual frameworks and models, and develop specific skills in support of sustainable development.

5.69 Volvo has provided education and training for over 40,000 employees, suppliers and dealers about the basic functioning of nature and conditions of life, the key environmental issues facing our society today (such as climate change, ozone depletion, loss of biodiversity), the environmental aspects and impacts of energy and transportation, and the company's environmental objectives and programs. In addition, about 350 people from almost 60 European suppliers have been given environmental education and clear performance expectations regarding establishment of an environmental management system, data exchange for life cycle assessments, "black and grey lists" of chemicals, optimized handling of waste and packaging, and recyclability of materials.

5.70 TransAlta implemented extensive employee training under Environment Canada's "Environmental Citizenship Initiative". Further, drawing on an external, not-for-profit institute, all of the firm's employees were immersed in a four-day grassroots program on environmental awareness, tools and activities. Consequently, early buy-in was generated across the company with a good general understanding of environmental issues and pressures. Employees applied their learning both in the workplace and in their communities and, as a result, became even better connected with local community concerns and issues.

5.71 Sony has in place a comprehensive process for educating its 160,000 people on environmental issues: Manufacturing Business School courses covering environmental management workshops and environmentally sensitive product development and design; programs for managers on the corporate role in addressing environmental issues; general orientation programs for new hires covering social responsibility and environmental issues, and the environment and Sony activities; seminars for newly hired technicians; specialist courses for environmental affairs managers; and correspondence courses.

5.72 For the NEPP, a key to successful implementation was the establishment of a training program for 400 government officials. In this program, conducted by

Education and training builds understanding of the issues, and develops specific skills in support of sustainable development.

MIT, senior staff were trained to be trainers and exercises were conducted that simulated possible implementation issues around NEPP.

Communicate regularly and widely

5.73 Effective communication can address many real needs of internal and external audiences. Given the range of interdependencies inherent in sustainable development initiatives, many key organizational objectives can be achieved only through major communication efforts. Typically these include:

- promoting greater understanding and commitment;
- disseminating learning and best practices inside and outside the organization;
- building awareness and support among key stakeholders and the general public;
- inspiring and motivating personnel; and
- creating momentum toward organizational goals.

5.74 Many tools are available, such as staff newsletters, corporate environment/sustainable development reports, advertisements, meetings and so on. New options, such as the worldwide web, provide real-time interaction and responses.

5.75 TransAlta has developed excellent internal communications and reporting systems. These practices extend to sustainable development, whether as reporting on procedures or in the *Sustainable Development Dashboard*, the quarterly newsletter for management and other employees.

5.76 One of the key steps in the creation of the NEPP was the development and dissemination of a "credible story" on sustainable development. Once the scientific and economic analysis was done, a public awareness campaign (commercials, newspaper and magazine advertisements) was started. Using Dutch television, sports stars and the motto "a better environment begins at home", the campaign began by conveying the importance of the environment and then shifted to what could be done. This second, action-oriented phase was often co-ordinated with specific policy measures (like the introduction of recycling programs).

5.77 From its strategic plan, SJ Rail selected 100 areas for improvement. It pledged to itself and to the entire nation of Sweden that it would improve in all 100 of these areas within three years. Then it published in newspaper inserts the specific goals and dates promised for completion, including individual managers' names and their specific implementation plans and targets. This was followed by advertising campaigns, throughout the trains as well as across Sweden, noting the areas for improvement and the target dates. As projects were completed, the campaign put up big red check marks in boxes next to each success. By the end of the first year, 36 had been completed, all on time, and the check mark had achieved public recognition.

Identify objectives, goals and targets

5.78 Leading thinkers and practitioners in the private sector characterize sustainable development as the next industrial revolution. It is about fundamental change, as contrasted with incremental change. An organization's vision must be translated into concrete, practical steps. Within the context of long-term objectives, short- and medium-term goals must be set with specific interim targets established along the way.

Within the context of long-term objectives, short- and medium-term goals must be set with specific interim targets established along the way.

5.79 Long-term objectives signal commitment and indicate the direction and extent of change expected. These objectives establish a stable framework within which individuals can plan and act.

5.80 The Netherlands NEPP aims for sustainable development in one generation. Twenty-year time frames were used in establishing the long-term objectives, such as reducing SO_2 emissions by 70 percent. Action plans were then negotiated with local governments and major target groups (industrial sectors and other groups responsible for developing solutions). These plans, known as covenants, provided clear goals in the medium term (five to ten years) and flexibility to reach the goals.

5.81 Many organizations establish ambitious "stretch" goals. While it is unclear how these goals will be met, the intention is to stimulate innovation, inspire personnel to think "out of the box", and demonstrate clear commitment on the part of the organization.

5.82 Sony has established goals that include improving recycling by 50 percent by 2000, achieving zero waste to landfill by 2010, and recycling 100 percent of paper and using only recycled paper by 2000.

5.83 Nortel's goals include 50 percent reductions in pollutant releases and solid waste to landfill by 2000, and a 30 percent reduction in paper purchases. Nortel monitors and reports annually on its progress toward these goals.

5.84 These objectives and goals have clear, specific, communicated targets for improvement. Such targets are necessary in order to monitor, review and achieve progress and continuous improvement.

Monitor and review progress

5.85 The organization needs a performance management system that supports progress toward its vision. Managers need to know when corrective action is required and what the effects might be. Internal and external stakeholders require regular and reliable progress reports. (A detailed study of performance measurement for sustainable development is presented in a separate study, described in Chapter 8 of this report.)

5.86 SJ Rail involves each manager in identifying its key success factors, developing measurable indicators, specifying its measurement reporting, and actively linking action plan items to follow-up activities. In all cases, the key is having specific goals combined with explicit measurement. The aim is for all employees to be aware of their units' indicators and ratios, how the indicators are related to one another, and how each individual's efforts contribute to achieving the objectives.

5.87 Volvo has established clear, measurable goals and objectives for the entire corporation and within each business area. Volvo certainly recognizes the adage "what gets measured gets done", and has developed a systematic process for assessing progress toward goals. Environmental objectives and results are monitored and reported within a traditional strategic planning process. In addition, an annual Corporate Environmental Report is developed and widely communicated. The objective is to stimulate continuous improvement.

5.88 E.B. Eddy released its Third Status Report on Sustainable Development in December 1996. The three reports provide a clear illustration of a progression in reporting on sustainable development.

A performance management system supports progress toward the organization's vision.

Conclusion

5.89 Organizations in both the public and private sectors face numerous pressures to improve their response to environmental and social needs while, at the same time, improving their economic performance. Those pressures vary, as do the choices organizations make in response to them. Consequently, no "recipe book" exists for selecting the most appropriate strategic choice for a given organization. However, the organizations

we studied illustrate a common approach to strategy in responding to the challenge of sustainable development.

5.90 In particular, the organizations articulate a long-term vision and the values and principles that will guide them on their journey. They consider how they should be different from their past and from other organizations. New ways of thinking about the organization and its policies, products and services are developed.

Realizing the opportunities and benefits inherent in sustainable development requires a comprehensive approach to strategy development and implementation.

5.91 Our case studies reveal that these organizations continually strive to identify and understand current and future pressures. They identify and mitigate potential risks with tools such as scenario building to broaden decision-making considerations and timelines; they tap external knowledge to supplement their organization's resources; and they expand their relationships to understand and respond to challenges and opportunities.

5.92 Translating new ways of thinking into new ways of acting requires building commitment and capability within the organization. Senior management support is key, but by itself is not sufficient. People throughout the organization must be engaged in developing and implementing the strategic choices. Education and communication are fundamental first steps to raise awareness, build the knowledge base and unlock the organization's capacity to discover and practise new ways of acting. The organization identifies clear and measurable objectives, goals and targets in the short, medium and long terms. Performance management processes monitor, review and modify the implementation.

5.93 Together, these activities form an iterative process of management. It is not appropriate to rank the activities identified in the preceding paragraph, as they are all necessary elements of the process. They are not part of a hierarchy, but rather each is dependent on the others, and all are linked. All are important in developing and implementing a successful strategy. Key to this iterative process is feedback of information among the activities to support continuous learning and improvement throughout the organization.

5.94 Sustainable development is a search for new ways of thinking and acting. It is a process of change guided by the imperative of achieving a better integration of economic, environmental and social perspectives into decision making. Sustainable development is not a destination but rather a journey, marked by new understandings and the deployment of new skills and innovations and leading to reduced environmental impact and enhanced social responsibility.

5.95 The organizations we studied take a comprehensive approach to developing and implementing strategy that allows them to realize the opportunities and benefits inherent in the pursuit of sustainable development. Federal departments and agencies can learn from these and other examples as they develop and implement their own sustainable development strategies.

About the Study

Objective

This study was undertaken to draw to Parliament's attention approaches, tools and leading thinking on developing and implementing sustainable development strategies. This information is valuable to assist parliamentarians in assessing the sustainable development strategies of departments and agencies in light of the approaches and practices of organizations recognized for having made progress toward sustainable development.

Approach and Methodology

We reviewed a wide range of literature in the areas of sustainable development and corporate strategy. We surveyed over 60 recognized experts and leading practitioners, including:

- consultants and academics from Canada, the United States, Scandinavia and the United Kingdom
- representatives from business, research and international organizations in Canada, Europe and the United States
- senior public servants from Europe and across Canada
- senior corporate environment/sustainable development officers from Canada, the United States, Europe, Scandinavia and Japan.

We reviewed the efforts of a number of organizations and conducted detailed case studies of seven organizations, in both the public and private sectors, recognized for having made progress toward sustainable development.

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Chapter 6

Environmental Assessment – A Critical Tool for Sustainable Development

The audit work reported in this chapter was conducted in accordance with the legislative mandate, policies and practices of the Office of the Auditor General. These policies and practices embrace the standards recommended by the Public Sector Accounting and Auditing Board (PSAAB) of the Canadian Institute of Chartered Accountants. The numbered paragraphs in bold face represent recommendations.

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Environmental Assessment – A Critical Tool for Sustainable Development

Main Points

6.1 Environmental assessment is the examination of planned projects, programs, policies or activities to ensure that potential impacts on the environment receive careful consideration before decisions are taken in connection with them. It is a critically important planning tool, given the potential for serious and irreversible damage to the environment from human activity.

6.2 Significant environmental consequences can be overlooked and environmental damage can occur as a result of some of the deficiencies that we have noted in the conduct of screenings. Screenings account for more than 99 percent of the approximately 5,000 environmental assessments carried out each year under the *Canadian Environmental Assessment Act.*

- Screenings may not consider all of the elements of a project or all of its potentially significant environmental impacts.
- Monitoring of mitigation measures and follow-up of environmental results are insufficient.

6.3 There are significant deficiencies in the quality and usefulness of public information about federal environmental assessment, particularly information on screenings. For example:

- Information in the federal environmental index is incomplete and difficult to use.
- A majority of the screening reports we examined did not provide sufficient information to determine if all significant environmental effects had been considered.

6.4 Environmental assessment is an important tool for dealing with broad environmental and sustainable development implications of policies and programs. Departments have been slow to implement environmental assessment of programs and policies as required by a 1990 Cabinet directive.

6.5 The federal government is not gathering the information needed to let Canadians know whether or not environmental assessment is achieving expected results.

6.6 Good practices identified during our audit provide a basis for improving the quality of environmental assessment.

Introduction

Inadequate environmental assessment can result in high financial and environmental costs

6.7 Environmental assessment is the examination of planned projects, programs, policies or activities to ensure that potential impacts on the environment receive careful consideration before decisions are taken in connection with them. It is a critically important planning tool, given the potential for serious and irreversible damage to the environment that can result from human activity. Failure to consider adverse environmental impacts before carrying out an undertaking can lead to significant environmental degradation, damage to human health, and increased economic costs. The high clean-up costs and environmental damage at the Sydney Tar Ponds in Cape Breton illustrate some of the consequences of lack of environmental foresight.

What is environmental assessment?

6.8 Although those involved in environmental assessment are not unanimous on what constitutes a "good" assessment, a review of current practices, legislation and literature suggests that it should include the major components set out in Exhibit 6.1. Whether or not each of these components is actually factored into an individual assessment will depend on the potential environmental significance and on the judgment of the individual conducting the assessment. Most of these components are included in the requirements of the *Canadian Environmental Assessment Act.*

We all have an interest in environmental assessment

6.9 Different parties have an interest in environmental assessment, including the proponent of the undertaking, the public that might be affected by it, and various governments. The interests of the parties sometimes coincide, but often may conflict, given that the costs and benefits of an undertaking, including the environmental costs and benefits, are different for each of the parties.

6.10 **Project proponents.** Project proponents recognize the need to conduct environmental assessments in order to avoid environmental damage for which they might be found liable. Many project proponents also recognize that they have a role to play as responsible citizens in their communities and that there is a potential economic benefit to be gained from being environmentally responsible. At the same time, conducting an environmental assessment often involves costs and delays, and the assessment may sometimes recommend costly measures that will not necessarily provide a return on the proponent's investment. Many of the costs of harming the environment are indirect and a proponent may see little reason to worry about costs that will be borne by the general public, by someone else or by future generations.

6.11 **The public.** The public has a general interest in protecting the environment in order to provide for its use and enjoyment by present and future generations. Generally people are concerned about sustainable development, and they understand that if the environment is damaged, it is they and their children who will bear the costs and suffer the consequences. People also benefit from undertakings through the creation of jobs and wealth. Some conflict can occur where different segments of the public share unequally in an undertaking's costs and benefits. Conflicts between loggers and environmentalists are examples.

6.12 **Various governments.** Governments must plan their own activities carefully in order to incorporate potential environmental effects into their decision making. For undertakings by other parties, governments also have a

Failure to consider adverse environmental impacts can lead to significant environmental degradation, damage to human health, and increased economic costs.

Exhibit 6.1

Components of a Project Environmental Assessment

Consider the need for the project and whether alternatives to the project exist.	For example, does a remote community need a new power plant or are there other means of meeting energy requirements (e.g. repairs, conservation, co-generation), AND, if a new power plant is needed, what technology should be used & where should it be located?
Describe the project, including any related or linked projects (scope of the project).	Could include linked projects (e.g. pipeline for a refinery). Also, projects may be combined because of proximity (e.g. two industrial plants on adjoining properties). Project description should include all the phases of carrying out the project (e.g. site preparation, operation and decommissioning of a mine).
Describe the physical and human environment in which the project is located.	Is the project in an urban setting, an open field, or a forest? Consider soil types, water table, vegetation (flora) and animal life (fauna). Is the project in an architecturally or historically important area? How is land currently used (e.g. parks, hunting and fishing)?
Identify potential interactions between the project and its environment.	Must consider the impacts of the project on the environment (e.g. pollution, destruction of wildlife habitat or recreational use of land) as well as potential impacts of the environment on the project (e.g. periodic flooding).
Evaluate the significance of potential environmental effects and consider possible mitigation measures.	Are the potential environmental effects significant? For example, destruction of a habitat for sparrows may be insignificant, while destruction of a whooping crane habitat may be significant. Many types of mitigation measures may be contemplated, including construction techniques, seasonal limitations on work, design features, operational procedures, compensation measures, etc.
Determine if the project should go ahead, taking into account projected environmental effects after proposed mitigation.	After alternatives and mitigation measures have been explored, there still may be residual adverse environmental effects that are significant. In exceptional circumstances, a project may still go ahead. The critical issue is that the assessment should ensure that those approving the projects are aware of all the potentially significant environmental effects.
If the project is approved, include requirement to carry out necessary mitigation measures.	Project approval should include controls or conditions to ensure that the proposed mitigation measures are actually carried out.
Verify that project and related mitigation measures have been carried out as approved.	Could be done by the approving authority directly, by independent third parties, or by obtaining certification from proponent or an expert, such as a professional scientist or engineer.
Follow up where appropriate to determine actual environmental effects and compare these to predicted effects.	This is most important if mitigation measures include new or unproved technologies, or if there is uncertainty about the predicted environmental effects. Lessons learned about the environmental effects should be used in future environmental assessments, where appropriate.

Note: Public input can be considered and information can be communicated to the public at most stages of the assessment.

broader interest to protect the health of current and future generations and of the environment. Furthermore, in many cases it will be up to the government to bear the cost of repairing environmental damage. Environmental assessment is a critically important tool that governments can use to protect their interests and to promote sustainable development.

Federal requirements for environmental assessment

6.13 The federal Environmental Assessment and Review Process came into effect in 1974. In 1984, Environmental Assessment and Review Process Guidelines were issued by order-in-council. The order-in-council, which required that all federal proposals be subject to an environmental assessment, was sometimes ignored by departments and agencies until a series of legal challenges — particularly those related to the Oldman River and Rafferty-Alameda Dams— resulted in the determination that the guidelines had the effect of law. In 1987, the federal government began extensive consultations on reforming the Environmental Assessment and Review Process. The *Canadian Environmental Assessment Act* came into effect in January 1995.

6.14 The Act applies to "federal authorities", that is, federal departments and a limited number of federal agencies. A distinctive feature of the Act is that most assessments are "self-directed". That is, federal authorities rather than a single government agency are responsible for ensuring that an environmental assessment of a project is conducted under the Act. Exhibit 6.2 sets out the process for determining whether a federal authority is required to conduct an environmental assessment. When a federal authority is required to conduct an assessment, it becomes a "responsible authority" under the Act. Both "federal" authority and "responsible" authority are used in this chapter depending on the circumstances.

6.15 The Act provides for four levels of environmental assessment. Each level represents additional public consultation and Agency involvement in the process. Exhibit 6.3 describes each type of environmental assessment and the numbers reported in the three years since the Act came into force. The table shows that more than 99 percent of environmental assessments are screenings. In such cases, it is the responsible authorities that are responsible for all of the decisions with respect to the environmental assessments.

6.16 The role of the Canadian Environmental Assessment Agency (the Agency) is to administer the Act and to provide related advice and assistance to the Minister of the Environment and to federal authorities with respect to the Act. Under the Act the primary operational responsibility of responsible authorities is the conduct of screenings, whereas the Agency's primary operational responsibility is the administration of the comprehensive study process and panel reviews.

6.17 Most of the federal authorities operate on a decentralized basis. Decisions to authorize projects, provide funding, dispose of land, or issue permits may be made in various regional or district offices rather than at a central headquarters. As a result, environmental assessments are reviewed by a wide variety of officials across the country. They may be dealing with different types of projects, proponents, and environments. They also may be dealing with a variety of different provincial, territorial or municipal governments and Aboriginal groups, whose attitudes may differ about the importance of environmental assessment or about what they may view as federal interference in their areas of jurisdiction.

6.18 The *Canadian Environmental Assessment Act* applies only to physical works and a limited number of physical activities. Four critical regulations were

A distinctive feature of the *Canadian Environmental Assessment Act* is that federal authorities rather than a single government agency are responsible for ensuring that an environmental assessment is conducted.

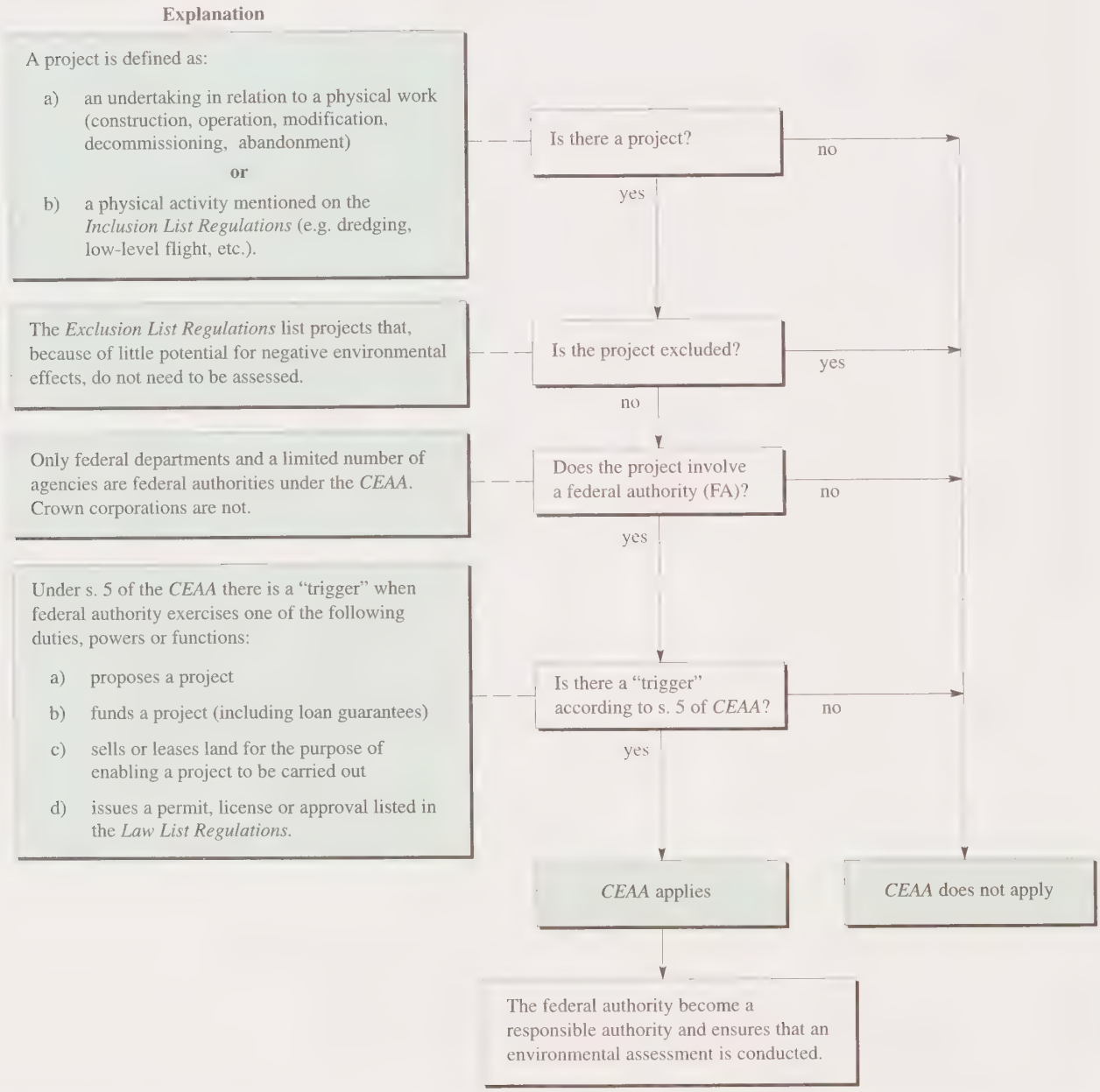
included at the time the Act came into force:

- The *Law List Regulations* list the various federal statutory and regulatory approvals that trigger an environmental assessment under the Act. An example is a permit to build bridges under the *Navigable Waters Protection Act*.

- The *Inclusion List Regulations* describe physical activities that must be subjected to an environmental assessment. Examples are low-level flying and ocean dumping.

Exhibit 6.2

When Does the *Canadian Environmental Assessment Act (CEAA)* Apply?



- The *Exclusion List Regulations* identify those undertakings with respect to a physical work that do not require an environmental assessment. Examples are routine maintenance of existing physical works and construction of small buildings.

- The *Comprehensive Study List Regulations* describe those types of projects that require a more thorough assessment than for a screening. An example is the construction of a new uranium mining facility.

6.19 To complement the Act, there is also a Cabinet directive that creates a non-legislated requirement for the environmental assessment of all federal

Exhibit 6.3

Levels of Environmental Assessment under the *Canadian Environmental Assessment Act*

	Self-directed Assessments		Independent Assessments	
	Screening	**Comprehensive Study**	**Mediation**	**Panel Review**
Environmental assessments conducted Jan. 1995 to Dec. 1997				
– Number	12,818	23	0	10
– % of total	99.7	0.2	0	0.1
When is this type of assessment required?	For all projects except those in *Comprehensive Study List Regulations* or in *Exclusion List Regulations*	For projects in the *Comprehensive Study List Regulations*	When the Responsible Authority or the Minister of Environment determines that the project is likely to cause significant environmental effects or that public concern is significant	
Who leads the environmental assessment?	Responsible Authority (RA)	Responsible Authority (RA) RA must send the assessment to the Minister of Environment, who determines if further assessment is required	Mediator, working with Responsible Authority and with assistance of the Agency	An independent assessment led by the Public Review Panel appointed by the Minister of Environment
Role of the Canadian Environmental Assessment Agency	Minimal. Provides advice if requested to do so by the responsible authority	Advises Minister of Environment on determination of whether further assessment is required	Advises Minister of Environment on terms of reference and selection of mediator or panel members Manages the process, including intervenor funding	
Factors to be considered	• Environmental effects, including cumulative effects and accidents • Significance of effects • Public comments where appropriate • Mitigation measures • Any matter the RA may require to be considered, e.g. need for and alternatives to the project	• Environmental effects, including cumulative effects and accidents • Significance of effects • Public comments • Mitigation measures • Purpose of the project • Alternative means of carrying out the project • The need for, and the requirements of, any follow-up program • Sustainability of renewable resources • Any matter the RA may require to be considered		

policy and program initiatives, where these are relevant.

Focus of the audit

6.20 Much of the public awareness of environmental assessment is based on the handful of high-profile cases that are the subject of panel reviews, comprehensive studies, or court cases. These represent considerably less than one percent of the environmental assessments that are carried out each year under the Act.

Approximately 5,000 screenings are carried out each year under the Act.

6.21 We chose to focus our audit on the challenges that responsible authorities must face in dealing with the approximately 5,000 screenings carried out each year under the Act. We also examined the processes in place for the environmental assessment of programs and policies in accordance with the Cabinet directive.

6.22 For our audit we selected 11 organizations that together account for more than two thirds of all environmental assessments carried out under the Act. In part, the organizations were chosen to reflect a cross-section of government activities and the various triggers for assessment under section 5 of the *Canadian Environmental Assessment Act.* (see Exhibit 6.4).

6.23 In each organization, we reviewed the procedures for conducting environmental assessments and examined a selection of files to determine how the processes actually functioned. We reviewed 187 screenings for projects located primarily in British Columbia, Alberta, Québec and Nova Scotia. For the Northern Affairs Program of Indian and Northern Affairs Canada, we examined files in the Yukon; and for the Atomic Energy Control Board, most of the projects examined were either in Ontario or Saskatchewan. The screenings were selected by the audit team and by the organizations to reflect typical activities and challenges in carrying out their responsibilities under the Act. The 187 projects vary greatly in size, location and potential for causing significant environmental damage. Where possible, we selected screenings for larger and potentially more environmentally significant projects.

6.24 The audit objectives, scope and criteria are set out in more detail at the end of this chapter in the section headed **About the Audit**.

Observations and Recommendations

Environmental Assessment Must Look at the Right Things

6.25 Environmental assessment can work only if those responsible are looking at the right things. We considered three questions:

- Are all projects that should be assessed under the *Canadian Environmental Assessment Act* and *Regulations* being assessed?
- Do the assessments consider the whole project?
- Do the assessments consider all of the potentially significant environmental effects?

Not all federal projects are assessed

6.26 **Federal authorities have put control procedures in place.** The federal authorities included in our audit have procedures in place that should ensure that an environmental assessment is carried out if required by the Act before a final decision on a project is taken. However, there are situations where environmental assessments are not conducted. These can occur where a federal authority is not aware of a project; where opinions differ on whether an assessment is required; or where the system breaks down and the assessment is conducted either after the project is approved or so late in the planning phase that it cannot influence the

project. Although such occurrences do not appear to be frequent, they point out a need for more vigilance.

6.27 Not all proponents apply for required permits. We were told that there are circumstances where no application is made for a required federal permit because the project's proponent either is not aware of the requirement or wants to avoid the costs related to the permitting and the environmental assessment. Penalties for not obtaining a federal permit can be much lower than the cost of going through the permitting and environmental assessment procedures. Canadian Coast Guard officials in one region told us they suspect that more than half the structures that should be requesting licenses under the *Navigable Waters Protection Act* are not. As a result, these structures do not undergo an assessment under the *Canadian Environmental Assessment Act.*

6.28 Federal authorities should strengthen compliance measures to ensure that all project proponents apply for required permits and licenses in the *Law List Regulations.*

6.29 There are uncertainties about the application of the *Fisheries Act.* Section 35 of the *Fisheries Act* makes it an offence to destroy fish habitat unless authorized in advance to do so by the Minister of Fisheries and Oceans. Penalties for destroying fish habitat without prior authorization can include jail terms, fines of up to $1,000,000 or both. Many observers consider the *Fisheries Act* one of the most potentially powerful pieces of federal environmental legislation. Environmentalists successfully lobbied to have authorizations under section 35(2) of the *Fisheries Act* included in the *Law List Regulations* so that such authorizations would trigger an environmental assessment under the *Canadian Environmental Assessment Act.*

6.30 Proponents frequently consult Fisheries and Oceans prior to undertaking projects that might destroy fish habitat. In many cases, the Department may simply advise, either orally or in writing, that the project as planned is not likely to result in destruction of habitat. Fisheries and Oceans officials may also make recommendations to modify the project or to take other mitigating measures designed to prevent the destruction of fish habitat. In reviewing projects, the Department's officials focus on avoiding fish habitat destruction and they consider it a success if they do not have to issue a letter authorizing the destruction of habitat.

6.31 Environmentalists have pointed out to us that they believe that the Department is not issuing section 35(2) authorizations in order to avoid having to conduct environmental assessments. The Department's position is that if Fisheries and Oceans meets the primary objective of avoiding habitat destruction, then no authorization for destruction is required. Consequently, there is also no requirement to conduct an evaluation under the *Canadian Environmental Assessment Act.*

6.32 Poor statistics and uneven interpretation of section 35(2) within Fisheries and Oceans before the *Canadian Environmental Assessment Act* came into force may have contributed to misunderstanding about how many section 35(2) authorizations would be issued each year. In recent years, Fisheries and Oceans Canada has clarified the situations that require a section 35(2) authorization and improved its information on such authorizations. Nevertheless, there are still large variations from one region of the Department to the next in the numbers of environmental assessments triggered by section 35(2) of the *Fisheries Act.*

6.33 Fisheries and Ocean Canada should enhance procedures to ensure that habitat protection provisions of the *Fisheries Act,* and consequent environmental assessment

Fisheries and Oceans officials focus on avoiding fish habitat destruction and they consider it a success if they do not have to issue a letter authorizing the destruction of habitat.

Exhibit 6.4

Number of Environmental Assessments Reported by Selected Responsible Authorities—19 January 1995 to December 1997

Responsible Authority (RA)	Trigger for conducting assessment under section 5 of *Canadian Environmental Assessment Act*				
	RA is Proponent	Funding	Federal Lands	Law List	Total*
Agriculture and Agri-Food Canada	275	480	313	11	1,077
Atlantic Canada Opportunities Agency	0	1,050	0	0	1,050
Atomic Energy Control Board	0	0	0	42	42
Canadian Heritage (Parks Canada)	676	31	160	630	1,480
Environment Canada	186	168	0	1,145	1,491
Fisheries and Oceans (Coast Guard)	188	8	6	277	438
Fisheries and Oceans (Habitat)	1	12	0	183	194
Indian and Northern Affairs Canada (includes the Indian and Inuit Affairs Program and the Northern Affairs Program)	182	74	375	1,485	2,116
Public Works sector of PWGSC	103	1	46	2	152
Western Economic Diversification	0	702	0	0	702
Sub-total (responsible authorities included in our audit)	1,611	2,526	900	3,775	8,742
Canada–Newfoundland Offshore Petroleum Board	0	0	0	1	1
Canadian International Development Agency	0	75	0	0	75
Correctional Service Canada	6	4	0	0	10
Federal Office of Regional Development – Quebec	0	1,175	0	0	1,175
Fisheries and Oceans (Small Craft Harbours)	270	60	193	1	524
Foreign Affairs	27	0	0	0	27
Health Canada	6	5	0	0	11
Human Resources Canada	0	67	0	0	67
Industry Canada	0	148	0	36	184
National Defence	393	0	0	0	393
National Energy Board	0	0	0	213	213
Revenue Canada	2	0	2	0	4
National Transportation Agency	27	0	0	198	225
Natural Resources Canada	60	25	0	37	122
Transport Canada	439	198	358	83	1,078
Sub-total (responsible authorities NOT included in our audit)	1,230	1,757	553	569	4,109
Total	**2,841**	**4,283**	**1,453**	**4,344**	**12,851**

* Total by responsible authority may be less than total by "trigger" because some environmental assessments may have been required by more than one sub-section of the Act.

Source: Federal Environmental Assessment Index

requirements, are applied consistently in all regions of the Department.

6.34 Last-minute environmental assessment contributes little to project planning. A couple of responsible authorities have a tendency to conduct environmental assessments only after all other factors in a project's approval have been considered. This is quite common with projects funded by the Atlantic Canada Opportunities Agency. We even noted a few cases in other organizations where, notwithstanding the control procedures in place, the screening was conducted after the project had been approved. Last-minute environmental assessment can put pressure on officials conducting the screening to deliver a product that is less detailed than required and has little likelihood of reducing a project's potential environmental impact.

6.35 Responsible authorities should ensure that environmental assessment is integrated early in the project planning and approval process.

Canadian Environmental Assessment Agency's response: *The Agency agrees with the recommendation, as it is one of the fundamental principles of the Act.*

The Agency is working with responsible authorities (RAs) to establish a Compliance Monitoring Framework, which will assist RAs to implement quality control mechanisms so that all environmental assessments can be integrated early in the project planning and approval process.

6.36 Many federal organizations are not required to conduct environmental assessments. Federal agencies such as Crown corporations and Harbour Commissions are not responsible authorities under the *Canadian Environmental Assessment Act*. Projects they undertake are not subject to the Act unless a responsible authority is involved in the project either through funding, the transfer of land, or the issuance of a licence or permit. The Act includes provisions that allow for the development of regulations for Crown corporations and Harbour Commissions. These regulations have not been developed, so projects undertaken by these organizations that do not involve a responsible authority are excluded from any formal requirement to comply with the Act. Furthermore, most of these federal organizations are also exempt from provincial environmental assessment requirements for projects they undertake. With the current trend to transfer certain federal activities to corporations outside the umbrella of federal departments, we can expect that an increasing proportion of such activities will not be subject to environmental assessment. For example, the Act is unlikely to apply to projects undertaken on federal airport lands that are now leased to local airport authorities.

Last-minute environmental assessment has little likelihood of reducing a project's potential environmental impact.

6.37 Projects that receive funding and that are on Indian lands are also excluded from environmental assessment under the Act, although there are provisions for making regulations to include them. In the absence of regulations, Indian and Northern Affairs Canada, Health Canada and the regional economic development departments and agencies have agreed to carry out environmental assessments before providing funds for such projects. Since these assessments are not carried out under the Act, they are not reported in the Federal Environmental Assessment Index. Nevertheless, we included a number of them in our review.

6.38 Where appropriate, the Canadian Environmental Assessment Agency should accelerate its plans to develop regulations to include a broader range of federal activities under the *Canadian Environmental Assessment Act*.

6.39 Federal authorities should ensure that leases of federal lands include provisions for environmental assessment of future projects.

Important portions of projects may be excluded from environmental assessments

6.40 The *Canadian Environmental Assessment Act* requires that in screenings and comprehensive studies the responsible authority determine the scope of the project, that is, those components of the proposed development that should be considered part of the project for purposes of the environmental assessment. These are to include the principal project and any other physical works or physical activities that are interdependent or linked to the principal project.

6.41 **The Agency has developed guidance on the scoping of projects.** The Act allows considerable latitude to responsible authorities in setting project scope. We expected that guidance would be provided by the Agency and departments that would be sufficient to achieve consistency in the scope of projects to be assessed. The Agency's guidance is intended to apply to the broad range of projects and activities that federal authorities deal with, and generally it provides a good starting point for scoping projects. However, some of the federal authorities we interviewed suggested that the Agency's guidance on scoping was too theoretical and thus not particularly useful for dealing with the types of projects for which they were responsible.

There have been inconsistencies from region to region or over time in the way some responsible authorities determined the scope of projects that were similar.

6.42 We expected that those departments who felt the need for more specific guidance would have developed such guidance with the Agency's assistance. However, only one of the federal authorities in our sample, Agriculture and Agri-Food Canada, had developed guidelines for scoping the projects it typically deals with under the Prairie Farm Rehabilitation Administration. One region of the Canadian Coast Guard has developed an informal guideline on the scoping of bridge projects that require a license under the *Navigable Waters Protection Act*; it limits the project to the bridge, 30 metres on either side of it, and 0.5 kilometre upstream and 1 kilometre downstream. While these distances may be sufficient to assess the impacts of a bridge on the local fish habitat, this guideline does not consider whether the bridge is in fact part of a larger project, such as a road.

6.43 Where principal projects clearly have no interdependent or linked projects or activities, determining the scope is relatively simple. Where the project scope could conceivably have included more than just the principal project, however, 6 of the 11 responsible authorities we reviewed had leaned to a project scope more narrow than recommended in the Agency's "Responsible Authority's Guide". Generally, scoping of projects tends to be narrower where the assessment is triggered by funding or by the delivery of a license or permit. In the 187 screenings that we reviewed, there were about 15 percent where access roads or other project components that could have been scoped with the principal project were not.

6.44 We cannot state with certainty whether or not the scope of any individual project was determined "correctly". We can state, however, that there have been inconsistencies from region to region or over time in the way some responsible authorities determined the scope of projects that were similar. The inconsistencies are due to a combination of factors: uncertainty and differences of opinion about the how project scope should be determined, particularly for assessments triggered by the issuance of a license or permit; the general nature of the Agency guidelines; lack of departmental guidelines; and concern about federal intrusion in areas of provincial jurisdiction. None of the federal authorities we reviewed had procedures in place to periodically review the appropriateness of the scope of projects they had assessed.

6.45 Federal authorities, in conjunction with the Canadian Environmental Assessment Agency, should develop guidelines specifically designed for the scoping of typical projects with which they deal.

Agency's response: *The Agency is leading an interdepartmental forum on Guidance and Training to improve the quality, timeliness, and customization of information for departments. The committee will share best practices and resources for the development and implementation of guidance and training material, and will assist departments in dealing with such issues as scoping.*

Environmental assessments may not consider all potentially significant environmental effects

6.46 The Act requires that a number of factors be considered for a screening (see Exhibit 6.3). These include the environmental effects of the project (including any cumulative effects), the significance of the effects, comments from the public where appropriate, economically and technically feasible mitigation measures, and any other matters "that the responsible authority may require".

6.47 The factors that the assessment will consider can be influenced by the wording of the Act, previous legal decisions, the advice and guidance provided by the Environmental Assessment Agency or by departments, input from the public, and the personal judgment of the individual responsible for the assessment. Moreover, the individuals making these judgments have a variety of skills and backgrounds. Every decision or judgment made along the way can affect the substance of the environmental assessment and the eventual decision made about the project.

6.48 Information on the project environment is often deficient. To determine the environmental effects of a project, and their significance, the individuals conducting the environmental assessment need a good understanding of the project and of the environment in which it is located. In at least 77 of the 187 projects that we reviewed, information on the existing environment was not provided or was too sketchy to allow a reader of the screening report to assess whether the assessment had considered all significant potential environmental effects. In some cases, the official carrying out the assessment or reviewing a third-party assessment did not even visit the site. We question whether, in the absence of a clear understanding of the project and the environment in which it is to be undertaken, it is possible to determine whether the screening has included all potentially significant environmental effects.

6.49 We found that 5 of the 11 responsible authorities whose assessments we reviewed tended to include a broader range of environmental effects than the other 6. The organizations that used checklists of potential factors to consider generally included a wider range of factors in their assessments. However, it was not always clear from the information available in the file that some of the items on the checklist had actually been seriously considered. We had more confidence in the usefulness of the checklists when supplementary information was provided explaining the responses.

6.50 Screenings triggered by the *Law List Regulations* consider only a narrow range of effects. We have already noted that such screenings tend to take a narrow approach to the project scope. They also tend to examine a narrower range of environmental effects than those for projects whose proponent was the responsible authority. Basing the screenings on a narrow project scope and on a limited range of potential environmental effects results in a greater likelihood that potentially significant

In some cases, the official carrying out the assessment or reviewing a third-party assessment did not even visit the site.

environmental effects will not be examined.

6.51 Concern about federal intrusion in provincial spheres of responsibility is one reason for this narrow approach to environmental assessment. Some of the environmental assessments triggered by the *Law List Regulations* are for projects that are primarily under provincial jurisdiction. The most obvious examples are private sector forestry and mining projects and provincial road construction. Such projects frequently require a permit under the *Navigable Waters Protection Act* or an authorization under the *Fisheries Act,* or both.

There is evidently considerable difference of opinion on how far the federal government may go in looking at environmental effects that come under provincial heads of power.

6.52 This means that in a typical environmental assessment for a bridge permit under the *Navigable Waters Protection Act*, the Canadian Coast Guard would consider only the bridge, and not any logging road of which it may be a part. Furthermore, it would consider the effects on fish habitat (a federal responsibility) but not, in most cases, on other wildlife habitat (a provincial responsibility), nor would it consider general effects of the logging operation on fish habitat (as this is beyond the scope of the bridge project). Parallel provincial environmental assessment processes may look at some of these issues in some provinces, but this is not always the case.

6.53 Environmentalists feel that the responsible authority in such cases has an obligation to broaden both the project scope and the range of issues to be assessed. Provincial authorities and private sector proponents generally disagree. The Agency's guide on scoping provides advice to responsible authorities exercising their discretion for setting the scope of projects and the effects to be considered. The guidance advises that for environmental assessments triggered under the *Law List Regulations*, the scope of the project and of the effects to be considered may have to be less broad than for assessments triggered for other reasons. An environmental group in Alberta is currently taking court action to require that a responsible authority broaden both the scope of the project and the range of factors to be considered in the case of a series of bridges being built for a logging road.

6.54 There is evidently considerable difference of opinion on how far the federal government may go in looking at environmental effects that come under provincial heads of power. Court decisions might provide additional guidance on how to deal with this issue.

Cumulative effects are difficult to assess

6.55 The *Canadian Environmental Assessment Act* requires that the environmental assessment "shall include a consideration of. . .any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out." The assessment of cumulative environmental effects presents some difficulties, due to the complexity of the issue and to disagreements on how such effects should be assessed.

6.56 Parks Canada has developed a guide on the evaluation of cumulative effects, and deserves to be acknowledged for taking the lead in cumulative effects assessment in the federal government. In December 1997, the Agency issued for discussion its own draft guide on the evaluation of cumulative effects. Both guides are based on an ecosystem approach and provide a good starting point for cumulative effects assessment. However, this approach requires a good understanding of the ecosystem in which the project is taking place and of the stressors that are acting on that ecosystem.

6.57 The challenge for responsible authorities and for project proponents is that normally they do not have complete information about the ecosystem where a project is being proposed. There is also

some dispute over whether it is the responsibility of project proponents or of governments to develop baseline information about ecosystems and their stressors. The Act does not provide any clarification of that issue. What is clear is that without the necessary information, it may be very difficult to assess the cumulative environmental effects of a proposed project.

6.58 Of the 187 environmental assessments in our sample, 159 were conducted by responsible authorities other than Parks Canada. We found that 48 of these 159 assessments indicated that cumulative environmental effects had been considered. In most of those assessments, however, there was little evidence to indicate the nature of the cumulative effects assessment, including whether there had been an analysis of the ecosystem and its stressors. In practice, only Parks Canada is considering cumulative environmental effects on a regular and rigorous basis.

6.59 The Canadian Environmental Assessment Agency should accelerate its work with federal authorities, provincial governments, academics, and other interested parties to encourage the assessment of cumulative effects, where appropriate.

Agency's response: *The Agency is currently consulting widely on a draft Practitioner's Guide on Cumulative Effects Assessment (CEA), prepared for the Agency by a working group of CEA specialists from the federal, provincial and academic communities. The Guide will be finalized and distributed in the coming months. Feedback to date from the consultations indicates that the Guide will be practical and useful, and will assist in effective assessment of cumulative effects.*

Information on Environmental Assessment Is Inadequate

6.60 Public participation is an important principle of environmental assessment. Members of the public can often bring valuable input to the environmental assessment through their knowledge of local conditions or of broader environmental issues. They may also have important knowledge or experience related to the proposed project or its proponents. The public, as we have noted, also has an interest in the results of environmental assessment. Good communication of information is essential in order to obtain public input. One of the underlying principles of the *Canadian Environmental Assessment Act* is public participation. The Act contains provisions to facilitate such participation.

Good communication of information is essential in order to obtain public input.

Information in the Federal Environmental Assessment Index is incomplete and difficult to use

6.61 Although the Act does not require it to do so, the Agency has created a computerized database called the Federal Environmental Assessment Index (the Index). Its purpose is to provide a "one-window access to information on the who, what, when, where, and why of any environmental assessment conducted under the Act, regardless of the responsible authority. It also directs the public to contacts and document listings related to specific environmental assessments." While federal authorities are not obligated to use the Index, all of the organizations we reviewed have elected to do so.

6.62 The concept underlying the Index is good, but it has been difficult to implement. Officials of responsible authorities find the Index difficult to use. Several complained that the procedures for entering data in the system were slow, awkward and time-consuming. This may account for the fact that fewer than half of

the 187 projects we reviewed had been registered in the Index before the assessment was completed and a decision made. More than 10 percent of the projects we reviewed still had not been registered at the time of our review.

6.63 Even when information is entered properly and on time, the Index is not as useful as it could be. It provides no information on the substance of the projects or the related assessments. Anyone wanting this information would have to request the related documents, such as the screening reports, from the contact person identified in the Index. Given the short time normally available for public comment on screenings, these delays may effectively preclude public input. Furthermore, the organization of the data in the Index and the related search tools are so poor that it is difficult to find information or to analyze it.

A majority of the 187 files we examined had screening reports that did not meet the minimum criteria set out in the Agency's guide.

6.64 The Canadian Environmental Assessment Agency should review the Federal Environmental Assessment Index and make improvements required to:

- **facilitate prompt data entry by responsible authorities;**
- **facilitate access by interested stakeholders and researchers; and**
- **provide improved search tools for stakeholders and researchers.**

Agency's response: *The Agency is making technological and other improvements to its web site, which includes the Federal Environmental Assessment Index (FEAI). An upgraded version of the FEAI will be easier to use by government departments and will encourage more timely data filing. Improved search tools will facilitate easier access to the Index by stakeholders and researchers.*

6.65 The Canadian Environmental Assessment Agency and responsible authorities should assess the feasibility of modifying the Federal Environmental Assessment Index to allow screening reports to be accessed directly through the Index as early in the screening process as possible.

Agency's response: *The Agency will work with responsible authorities to look into the possibility of making screening reports accessible through the FEAI. The Agency is also looking into the feasibility of making comprehensive study reports available on its web site. Panel reports are already accessible and can also be consulted on the Agency's CD-ROM library, which is updated annually.*

Screening reports are often incomplete

6.66 The *CEAA* requires the preparation of a screening report that "summarizes the results of the screening". The Agency's Responsible Authority's Guide provides guidance on what should be included in the screening report. This includes a description of the project, a description of the environment, a summary of environmental effects and their significance, and a list and description of any mitigation measures needed to reduce significant adverse environmental effects.

6.67 A majority of the 187 files we examined had screening reports that did not meet the minimum criteria set out in the Agency's guide. In particular, the description of the project or of the environment was often incomplete. This would make it very difficult for a member of the public to determine whether the environmental assessment had in fact considered all of the potentially significant environmental effects of the project.

6.68 Responsible authorities should ensure that screening reports meet the requirements for public information as set out in the Responsible Authority's Guide of the Canadian Environmental Assessment Agency.

Agency's response: *The Agency is leading the development of a compliance*

monitoring framework for the Act and its regulations. This will assist federal departments to gather consistent information on compliance with the Act, and on the quality of their environmental assessments. This will in turn assist the RAs in standardizing the information they gather for screening reports and will improve the consistency and quality of information.

Poor information undermines public participation

6.69 Public participation in the federal environmental assessment process is one of the fundamental principles set out in the Act. Having an information source that is neither timely nor complete, that is difficult to access and to use, and that may not meet Agency guidelines compromises the principle of facilitating public participation in the environmental assessment of projects.

6.70 Despite these shortcomings, there are some signs that responsible authorities are trying to improve the quality of information to the public. For example, Parks Canada is very sensitive to public concerns about environmental degradation in our parks. In one of its regions, we were told that project proposals and requests for public input are posted in Parks Offices and Parks Visitor Centres before any environmental assessments are completed. In some cases, copies of this information are also faxed to public interest and environmental groups who have shown an interest in a particular park.

The Agency's annual reports avoid difficult issues

6.71 On behalf of the Minister of the Environment, the Canadian Environmental Assessment Agency prepares an annual report to Parliament "on the activities of the Agency and the administration and implementation of this Act." The report "shall include a statistical summary of all environmental assessments conducted or completed" during the year under review.

6.72 The Agency has faced significant challenges in implementing and administering the Act. Nevertheless, the Annual Report makes little mention of these concerns, focussing instead on the Agency's activities and a statistical summary of assessments conducted. As a result, the report does not sufficiently address, for the public and parliamentarians, whether steps need to be taken to improve the implementation of the Act. However, such information was included in the Agency's first Performance Report to Parliament in November 1997 and its 1998–99 Estimates — A Report on Plans and Priorities, tabled in Parliament in March 1998.

The Agency's Annual Report does not sufficiently address whether steps need to be taken to improve the implementation of the Act.

6.73 The Canadian Environmental Assessment Agency should prepare its Annual Reports to Parliament in a manner that points out the challenges to be met in implementing the *Canadian Environmental Assessment Act* or, as a minimum, makes reference to any other of its reports to Parliament that contain this information.

Opportunities Exist to Improve the Efficiency of Environmental Assessment

6.74 We have pointed out situations where better environmental assessment is required. However, resources are not limitless, and those available may already be stretched to the limit. With thousands of projects to be approved each year, it is important to seek ways to make environmental assessment as efficient as possible. One way to increase efficiency is to focus the most effort on projects with potentially the greatest environmental impact. Another is to use information and experience from previous environmental assessments, particularly when dealing with new cases involving similar situations. Further, when several parties have an interest in ensuring that a

particular environmental assessment is conducted, there are opportunities to streamline and co-ordinate their efforts.

An important efficiency tool is not being utilized

6.75 While many environmental assessments are unique, others can involve repetitive situations with similar projects in similar environments. Under the Act, a screening report that could be used as a model in conducting screenings of other projects in the same class can be declared a "class screening". The intent of this provision is to simplify subsequent screenings of similar projects. Even with class screenings, however, the responsible authority needs to take into account site-specific circumstances and cumulative environmental effects.

6.76 We noted three instances where procedures have been put in place for dealing with repetitive situations without "reinventing the wheel" each time. This usually involves collecting basic information on the project, activity and environment at the initial planning stage, and using the information to conduct a screening. For many repetitive and small-scale projects, this basic information is sufficient for the responsible authority to determine whether there may be any potentially significant environmental effects. If this basic information raises any concerns, or if there is uncertainty about the information, a more in-depth screening would be conducted.

6.77 These situations would seem an ideal basis on which to prepare a model screening and have it declared a class screening. The Agency feels that there are gains to be achieved in both efficiency and quality through the class screening process. Since the proclamation of the Act, the Agency has worked with departments to identify potential class screenings. As yet, however, only Parks Canada has brought forward a class screening for approval.

6.78 Responsible authorities indicated to us that they felt the procedures to declare a class screening were too cumbersome. They find it more expedient to conduct individual assessments of similar projects than to initiate a class screening declaration.

6.79 The Canadian Environmental Assessment Agency and responsible authorities should intensify their efforts to improve quality and efficiency in the environmental assessment of similar projects by taking advantage of the class screening provisions of the *Canadian Environmental Assessment Act* or of other similar approaches.

Agency's response: *The Agency is actively assisting federal authorities in the development of class screening documents across Canada. Several departments are presently developing class screenings including Indian and Northern Affairs Canada, Fisheries and Oceans and Parks Canada. Several process issues have been resolved to move this opportunity forward.*

There is little evidence of federal-provincial duplication

6.80 Concerns have been expressed publicly, primarily by industry groups, that federal and provincial environmental assessment processes may overlap and that this leads to duplication, cost increases and delays to proponents. The Canadian Council of Ministers of the Environment has made environmental harmonization, including environmental assessment, one of its priorities. The federal government has signed harmonization agreements for environmental assessment with Alberta, British Columbia and Manitoba. On 29 January 1998 the Canadian Council of Ministers of the Environment, with the exception of Quebec, signed "A Canada-wide Accord on Environmental Harmonization". A sub-agreement on

environmental assessment was also signed as a part of this accord.

6.81 The nature of our federal system is such that there can be overlap of federal and provincial responsibilities with respect to a project. Of the 187 projects we reviewed, 25 required provincial environmental assessments. In most of the 25 cases, there was more evidence of federal-provincial co-operation than of duplication of effort.

There was more evidence of federal-provincial co-operation than of duplication of effort.

Federal authorities need to co-operate with each other

6.82 Another compláint from project proponents relates to interdepartmental differences of opinion or delays in getting feedback from one "expert department" on an evaluation involving more than one federal authority. In some cases, these concerns are real. Expert departments, primarily Fisheries and Oceans and Environment Canada, may not have sufficient information or resources to provide a quick response. Furthermore, because of the latitude allowed to responsible authorities by the Act, they may have different opinions on how a project or an assessment should be sco for the purposes of the Act.

Different federal authorities may have different opinions on how a project or an assessment should be scoped for the purposes of the Act.

6.83 In other cases, however, the delays are not attributable to the *Canadian Environmental Assessment Act*. If an environmental assessment is not started until late in the planning process, then it is the poor planning process and not the environmental assessment that is responsible for the delay. We also noted that the reviews that Fisheries and Oceans is required to undertake under the *Fisheries Act* could cause delays, even if there were no requirement for environmental assessment.

6.84 The Agency and federal authorities have established Regional Environmental Assessment Committees (REAC) in several regions across the country to provide a forum for federal officials to discuss environmental assessment issues and individual cases that may involve more than one federal authority. Members we interviewed indicated that the Committees are a valuable forum for improved interdepartmental co-operation.

6.85 The *Regulations Respecting the Co-ordination by Federal Authorities of Environmental Assessment Procedures and Requirements*, which came into force in April 1997, propose to eliminate delays where more than one federal authority is involved. The Regulations impose deadlines on federal authorities for determining whether or not they will require an environmental assessment and for identifying and notifying all other potential federal authorities who may have responsibilities under the Act with respect to the project. All of the screenings we reviewed were for projects approved before April 1997, so we have not examined the results of the new Regulations.

Environmental Assessment Does Not End with Project Approval

Mitigation measures are not always monitored

6.86 Environmental assessment is supposed to identify potentially significant adverse environmental effects and any mitigation measures that will reduce them to insignificance. Responsible authorities have generally been including mitigation measures in the terms and conditions of their approval, or building them into related contract documents. It is less obvious from the information provided to us that responsible authorities have verified whether mitigation measures were actually implemented by project proponents. In some cases, departments said they had to allocate scarce resources to activities other than the monitoring of mitigation. The two cases in Exhibit 6.5 point out the importance of monitoring mitigation measures.

Environmental assessment is a predictive science, and there is an element of uncertainty about the effects being predicted, or about the effectiveness of the mitigation measures.

6.87 Responsible authorities should ensure that mitigation measures are included where required as a condition of approval and that project proponents implement them.

Follow-up of environmental effects needs to be strengthened

6.88 Environmental assessment is a predictive science, and there is an element of uncertainty about the effects being predicted, or about the effectiveness of the mitigation measures even if carried out as recommended. The Agency's Responsible Authority's Guide recommends that in cases of uncertainty, a follow-up program should be implemented to verify whether actual environmental effects match predictions. This process should help to ensure that any unanticipated environmental damage is avoided, and can build up a base of knowledge to improve predictions in future assessments. The Federal Environmental Assessment Index allows responsible authorities to indicate whether a follow-up is to be conducted.

6.89 Of the 187 projects that we examined, 48 met the criteria in the Agency's Guide indicating that follow-up of environmental effects would be appropriate. Information on file indicated that responsible authorities planned to follow up on about three quarters of these 48, yet none of them was identified for follow-up in the Index. We are concerned that one quarter of required follow-ups are not requested as a condition of approval. Because most of our audit samples were environmental assessments of recent projects, it was too early to verify whether follow-up of actual environmental effects had been conducted or whether the responsible authorities shared the results of follow-ups with other federal authorities and the Agency.

6.90 Responsible authorities should ensure that, where appropriate, follow-up of the environmental effects of projects is carried out and that the

Exhibit 6.5

The Importance of Monitoring Mitigation Measures

Case Study — Using Environmental Monitors

For a large construction project in British Columbia, the Canadian Coast Guard component of Fisheries and Oceans required the proponent to employ a qualified "environmental monitor" to ensure that the environment was protected and that mitigation measures were put in place. These independent consultants are empowered to issue orders, including stop-work orders, to ensure that the projects are carried out as required and that the environment is safeguarded.

In the case that we examined, heavy rainfall during construction, combined with operating procedures that did not comply with those recommended by the responsible authority, threatened to cause serious environmental damage from run-off. The environmental monitor ordered work to be stopped and corrective measures taken. Without the presence of the environmental monitor, there could have been serious damage to the environment.

Case Study — Canada Infrastructure Works Program

The Atlantic Canada Opportunities Agency was the federal implementing organization responsible for a golf course project approved under the Canada Infrastructure Works Program. As part of the project approval, the proponent was required to implement mitigation measures to avoid the type of consequences that environmentalists are concerned about with golf courses: run-off of fertilizers and pesticides, and soil erosion.

As with the B.C. case, this project also had to contend with heavy rainfall, and the contracting procedures did not fully comply with the mitigation measures outlined in the environmental assessment. Unlike the other case, the implementing organizations did not take steps to ensure that the project's construction was monitored. The result was that soil erosion did occur. These consequences might have been avoided or reduced if the project had been adequately monitored.

results of these follow-ups are shared with the Agency and other federal authorities.

Agency's response: *The Agency is chairing an interdepartmental committee to investigate the problems with follow-up under the Act and to analyze possible options, including a regulation to address these problems. This forum will assist federal authorities in gathering and sharing information on follow-up with the Agency and other federal departments.*

The Agency and responsible authorities are not gathering information on results

6.91 Environmental assessment is widely accepted as a valuable planning tool, not only by environmentalists but also by proponents of projects. However, many of the financial and environmental benefits of environmental assessment are difficult to quantify. Given the costs to governments and project proponents of conducting environmental assessments, it is important that the costs and results be measured and reported. The *Canadian Environmental Assessment Act* includes a requirement for comprehensive review of the provisions and operation of the Act five years after the Act coming into force. Such a review will require good information on program costs and results. A Joint Monitoring Program conducted by the Agency and Industry Canada examined some aspects of program delivery, costs and results over a one-year period early in the implementation of the Act. It recommended an expanded monitoring program. However, in the three years since the Act came into effect, the Agency has still not established a comprehensive framework for gathering such information. The weakness in monitoring mitigation measures and following up on results will make it more difficult to gather the required information.

6.92 The Canadian Environmental Assessment Agency, in consultation with federal authorities, should:

- **establish a framework for conducting a comprehensive review of the provisions and operation of the *Canadian Environmental Assessment Act*; and**
- **collect the information required to conduct the review.**

Agency's response: *The Agency will soon be developing an overall framework for conducting a comprehensive review of the provisions and operations of the Act. In support of the upcoming review, the Agency has undertaken a number of initiatives that will ultimately provide useful information.*

As mentioned in the response to 6.68, the Agency is leading the development of a compliance monitoring framework for the Act and its regulations.

The Agency has also developed, in partnership with Industry Canada, Environment Canada and Natural Resources Canada, a multi-year Ongoing Monitoring Program to follow up a one-year Joint Monitoring Program.

The Ongoing Monitoring Program will collect information on:

- *the costs and source of costs of assessments associated with comprehensive studies, public reviews and large-scale screening projects;*
- *the benefits to industry and the public of preparing environmental assessments; and*
- *actual contributions to sustainable development brought about through comprehensive studies, public reviews and large-scale screening projects.*

The results of the Ongoing Monitoring Program will assist the Agency in refining the process to maximize benefits and minimize costs to the government and to the private sector.

Given the costs to governments and project proponents of conducting environmental assessments, it is important that the costs and results be measured and reported.

Both initiatives outlined above will contribute much information for use in the five-year review of the Act.

Decentralized Implementation Needs Quality Control

Decentralized delivery can result in uneven application of legislation.

6.93 The Act is implemented in a very decentralized fashion. This can be a positive feature, as it means that officials directly involved in decision making are also responsible for the environmental assessment of the project. The risk with decentralized delivery is that, as we observed in the case of the *Canadian Environmental Assessment Act,* it can result in uneven application of legislation. Only a few of the organizations we audited have adequate measures to monitor whether or not environmental assessments are conducted in accordance with the requirements of the Act and the Agency's Responsible Authority's Guide.

6.94 Federal authorities and the Canadian Environmental Assessment Agency should establish procedures to:

- **monitor whether or not environmental assessments are conducted in accordance with the requirements of the *Canadian Environmental Assessment Act* and the Agency's Responsible Authority's Guide; and**
- **ensure that decisions with respect to the need for an assessment, project scope and potential effects to be considered are made consistently from region to region and by all federal authorities.**

Without environmental assessment of programs and policies, federal departments and agencies may not be able to implement the government's sustainable development objectives.

Agency's response: *As indicated in the responses to 6.68 and 6.92, the Agency is leading the development of a compliance monitoring framework for the Act and its regulations. This will provide information on whether environmental assessments are conducted in accordance with the requirements of the Act and the Agency's Responsible Authority's Guide.*

The Agency will be developing guidance and training (as described in the response to 6.45) to assist federal authorities in the areas mentioned. The Agency will also continue to facilitate consistency of approach through its various interdepartmental committees.

Policy and Program Assessments Are Not Setting the Tone

Why policies and programs need to be assessed

6.95 The environmental assessment of programs and policies, also referred to as "strategic environmental assessment", is seen as an essential tool for dealing with the broader environmental and sustainable development implications of programs and policies that may not be addressed easily at the project level. We are concerned that without environmental assessment of programs and policies, federal departments and agencies may not be able to implement the government's sustainable development objectives. A 1990 Cabinet directive established a non-legislated process for environmental assessment process of federal policy and program initiatives submitted for Cabinet consideration, and for other policy and program decisions made by ministers without reference to Cabinet.

Departments have been slow to implement environmental assessment of programs and policies

6.96 In 1996, the Agency published a "Review of the Implementation of the Environmental Assessment Process for Policy and Program Proposals". The study concluded that there was a need to strengthen the implementation of the Cabinet directive. In particular, the study found that:

- 60 percent of departments and agencies indicated that they had conducted environmental assessments of policy and program proposals;

- 45 percent had prepared documentation on the environmental implications of their proposals;

- 25 percent had prepared guidance material on the environmental assessment of policy and program proposals;

- 20 percent had frameworks for accountability;

- 10 percent had maintained a regularly updated list of proposals assessed.

6.97 The interviews we conducted support the findings of the study. We found that most departments had not developed guidelines or directives on the environmental assessment of policy and program proposals. Even when they are done, these assessments are more often broad than comprehensive. In addition, officials preparing these environmental assessments do not necessarily consult other departments with environmental expertise or their own experts in project environmental assessment. We were surprised to discover that in a couple of departments, the senior officials to whom we had been referred as those responsible for the preparation of Cabinet documents either were not aware of the existence of the Cabinet directive or did not know how it was being implemented.

Steps to improve the environmental assessment of programs and policies may not be enough

6.98 An Interdepartmental Committee on Policy and Program Environmental Assessment, composed of officials from 13 federal departments and the Agency, is working to improve the implementation of the Cabinet directive. In January 1997, the Agency and the Committee produced a training module on the environmental assessment of programs and policies. However, we are concerned that the training module may not be enough. Our interviews suggest that little has changed since the 1996 study in the way departments deal with the environmental assessment of policies and programs.

6.99 Two organizations stand out as having taken steps to implement strategic environmental assessment. Parks Canada is conducting environmental assessments of park management plans, and has also conducted environmental assessments of other proposals, including a proposal on the setting of its fee structure. Agriculture and Agri-Food Canada has been developing agro-environmental indicators, which are incorporated in the analysis of program proposals.

Departments need to be encouraged to implement the Cabinet directive

6.100 Some departments and the Agency have suggested that the tabling of sustainable development strategies, as required by a 1995 amendment to the *Auditor General Act*, will help speed up the implementation of the Cabinet directive. In our opinion, departments may need additional pressure from parliamentarians, the public and the Commissioner of the Environment to fully implement the directive.

6.101 The Canadian Environmental Assessment Agency should work with other federal departments and agencies to improve compliance with the Cabinet directive on the environmental assessment of policies and programs.

Agency's response: *The Agency concurs with the strong link drawn between the environmental assessment of policies and programs and the implementation of sustainable development objectives. It is increasing efforts interdepartmentally and with senior officials to increase awareness and encourage widespread use of policy environmental assessment. The Agency intends to conduct a follow-up to its 1996 survey on the application of policy assessment in order to measure progress.*

Conclusion

There are many opportunities for improved environmental assessment

6.102 We identified several areas where environmental assessment needs to be improved. These include the need for:

- a broader and more consistent view of projects and potential impacts to be assessed;
- better information in screening reports and in the Federal Environmental Assessment Index, and improved public access to this information;
- better use of efficiency tools such as class screenings;
- more thorough monitoring of mitigation measures and follow-up on results; and
- increased attention to the environmental assessment of policies and programs.

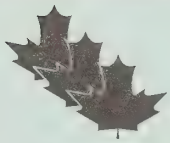
The shortcomings we noted are neither universal nor catastrophic.

6.103 Good practices need to be shared. The shortcomings we noted are neither universal nor catastrophic. We also found examples where responsible authorities, on either a regional or a national basis, had developed procedures or processes to improve the consistency and efficiency of implementation of the *Canadian Environmental Assessment Act*. However, more effort is needed by responsible authorities and by the Regional Environmental Assessment Committees in promulgating and encouraging sharing of best practices to improve consistency and efficiency. The good examples that we found confirm that the recommended improvements are achievable.

Several factors contribute to the deficiencies that we observed

6.104 The principal factors contributing to the deficiencies that we have noted include lack of clarity in the Act; guidance from the Agency that is not always as practical as it could be; insufficient guidance from responsible authorities; different backgrounds and skill levels of officials; and uncertainty about whether or how far federal environmental assessment can extend into areas of provincial jurisdiction. In our opinion, a significant contributing factor to the problems noted is a lack of review or quality control, by either the Agency or responsible authorities, to ensure consistent and predictable application of the Act.

6.105 The Agency could be more forceful. The Canadian Environmental Assessment Agency does not have the authority to interfere in decisions that are the responsibility of the responsible authorities under the Act. However, we believe that the Agency could be more forceful in expressing its concerns when it observes problems in the way responsible authorities are carrying out their responsibilities under the Act.



About the Audit

Objectives

Our objectives were:

- to assess whether the *Canadian Environmental Assessment Act* and *Regulations* are being implemented in an economic, efficient, consistent and predictable way by the Canadian Environmental Assessment Agency, responsible authorities, and expert departments;
- to identify impediments to implementation of the Act; and
- to determine whether departments and agencies are complying with the Cabinet directive on the environmental assessment of proposed policies and programs.

Scope

The *Canadian Environmental Assessment Act (CEAA)* currently applies to all federal departments and to a limited number of federal agencies, such as the Atlantic Canada Opportunities Agency and the Atomic Energy Control Board. The Act does not apply to Crown corporations. We included in our audit a sample of federal organizations that together account for approximately two thirds of all environmental assessments carried out under the Act:

Agriculture and Agri-Food Canada
Atlantic Canada Opportunities Agency
Atomic Energy Control Board
Canadian Heritage (Parks Canada)
Environment Canada
Fisheries and Oceans (Habitat)
Fisheries and Oceans (Coast Guard)
Indian and Northern Affairs Canada (Northern Affairs Program)
Indian and Northern Affairs Canada (Indian and Inuit Affairs Program)
Public Works sector of Public Works and Government Services Canada
Western Economic Diversification

Most environmental assessment is carried out on a decentralized basis, usually at the regional or provincial headquarters of the organization. We selected for detailed review a sample of 187 environmental assessments carried out by the federal organizations in British Columbia, Alberta, Québec and Nova Scotia. For the Northern Program of Indian and Northern Affairs Canada we examined files in the Yukon, and for AECB, most of the projects examined were either in Saskatchewan or Ontario.

We reviewed the environmental assessment processes established by each of these organizations at their corporate headquarters and in the selected regions. We also examined how these processes were actually put in place with respect to the 187 sample files selected.

The Canadian Environmental Assessment Agency is responsible for administering the *CEAA* and for providing advice and guidance to the federal authorities. We reviewed the guidance provided by the Agency and its activities in support of its responsibilities under the Act.

Criteria

We set out detailed criteria for each of the audit issues that we examined. Because of the large number of criteria, only the major ones are listed here. Some of the criteria focussed on the Act itself, or on the role of the Agency. In particular, we expected that the Agency would be a leader in environmental assessment in the federal government. We expected that the Agency would provide guidance on the implementation of the Act such that federal authorities, project proponents, and other stakeholders would have a common understanding of what is required by the Act. We also expected that the Agency would develop a reporting framework for federal environmental assessment that would provide complete, relevant, and reliable information on overall progress in implementing environmental assessment in the federal government.

Other criteria focussed on the federal authorities who are responsible for conducting screenings under the Act. We expected that federal authorities would implement environmental assessment in their own organizations in accordance with *the Canadian Environmental Assessment Act* and with guidance provided by the Agency. We also expected that federal authorities would take steps to ensure that Agency guidance was tailored to their specific organizational programs and that environmental assessment was implemented in a consistent manner across all regions and programs. We expected that federal authorities would implement the Act in co-operation with the Agency, other federal authorities and provincial agencies. We expected that information would be solicited from the public and provided to the public in a manner that respected the public participation objectives of the Act.

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Chapter 7

Counting the Environment In

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Counting the Environment In

Main Points

7.1 As government departments struggle with defining and implementing sustainable development, they need reliable information on the potential environmental and social effects of their activities, the costs of environmental management, and the potential benefits of alternative approaches.

7.2 Agriculture and Agri-Food Canada and other federal departments are taking proactive steps by implementing Environmental Management Systems to reduce the potential environmental impacts of their operations. Jointly with Agriculture and Agri-Food Canada, we examined how combining financial and non-financial data about their operations could improve environmental decisions and could be used for reporting performance. Similar measures could be applied consistently across government by other custodial departments.

7.3 Agriculture and Agri-Food Canada has identified significant opportunities for cost reductions and environmental benefits through implementation of pollution prevention and resource conservation programs, particularly through energy savings. However, managers may be constrained from taking full advantage of these opportunities by limited resources, perceived disincentives and lack of awareness of possible investments. These constraints are shared by other departments.

7.4 A review of emerging practices in other organizations provides lessons about how to measure, report on and improve environmental performance. Overall, the public sector has yet to catch up with some advanced private sector organizations in tracking and reporting the environmental aspects of their operations, partly because of differences in mandate and incentives. The Government of Canada has an opportunity to demonstrate leadership in developing and using analytical tools for these purposes.

7.5 The Commissioner of the Environment and Sustainable Development is committed to a five-year project to assist government departments in developing decision support tools for integrating environmental, social and economic information. The first phase (this chapter) addresses how environmental information can be brought into decisions about the federal government's extensive operations. Subsequent phases will focus on implementation and on developing decision support tools for policies and programs.

Introduction

Good decision making weighs all the dimensions of sustainable development

7.6 As federal departments grapple with defining and implementing sustainable development, they must make decisions based on different information than they have used in the past. The definition of sustainable development in the *Auditor General Act* (see Appendix A — Glossary) leads to questions such as: How well are we meeting the economic, social and environmental needs of people today? What are the implications of actions we take today for our children? Will their lives be better?

7.7 Good answers to these questions cannot be obtained by considering only some needs and neglecting others. To move toward sustainable development, federal departments need reliable information on past performance as well as good predictions of the future. For example, Agriculture and Agri-Food Canada weighed several different dimensions of crop insurance programs through an integrated assessment (Exhibit 7.1). Integrating information in this way can contribute to better sustainable development decisions.

Integrated decision making is especially important for the federal government

7.8 Even after its recent reductions in budgets and employees, the federal government is still one of the largest operations in Canada. It affects hundreds of thousands of Canadians through its internal operations, such as hiring and purchasing practices. Given the national scope of its activities and the multitude of its effects on Canadian society (for example, taxation, regulations, transfer payments, promotion of voluntary programs and provision of information), the government must make decisions carefully. Those decisions encompass a broad spectrum of issues ranging from the use of recycled oil to energy efficiency in buildings and to the long-term debt Canadians will bear.

7.9 The federal government has a special responsibility to provide public services, such as national defence, and maintain assets of national significance, such as national parks, that are protected

Agriculture and Agri-Food Canada recently prepared an integrated economic-environmental assessment of crop insurance programs. The assessment considers the direct socio-economic effects of the insurance programs on farm management practices including tillage, crop selection, use of marginal land and the requirements for fertilizer and pesticides. It then estimates the effects (positive and negative) on soil health, water quality and wildlife habitat. Both short- and long-term implications are included. The results of the assessment should be useful in deciding whether and how to adjust the programs.

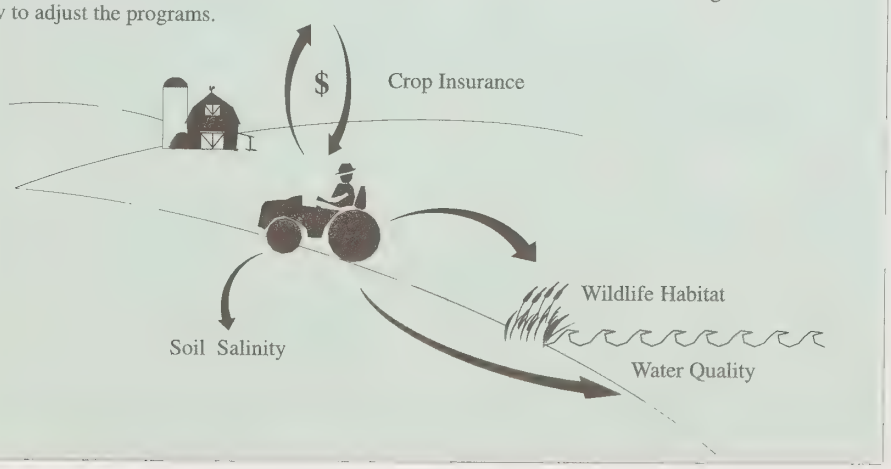


Exhibit 7.1

Evaluating the Effects of Crop Insurance

Source: Agriculture and Agri-Food Canada, 1997

and conserved for the benefit of all Canadians. The government's role of balancing competing and complementary objectives, and weighing the interests of multiple stakeholders, leads to a need to consider a wide range of information.

7.10 Reflecting this responsibility, the government has made a public commitment to integrate environmental factors in its decisions. First, in the *Code of Environmental Stewardship* (1992), the government committed itself to integrating environmental concerns with operational, financial, safety, health, economic development and other relevant concerns in decision making. In *A Guide to Green Government* (1995), the federal government asserted, "An integrated approach to planning and decision making will ensure progress on all the dimensions — social, economic and environmental — of sustainable development."

The government has made a public commitment to integrate environmental factors in its decisions.

Focus of the study

7.11 Sustainable development strategies are a new requirement for federal departments under the 1995 amendments to the *Auditor General Act*. Recognizing that this initiative will require more emphasis on gradual improvement rather than on immediate achievement of precisely defined objectives, the Commissioner of the Environment and Sustainable Development is committed to working with departments to build capacity to achieve sustainable development goals.

7.12 In his first Report, issued in March 1997, the Commissioner described four studies. One of them was to address how information on environmental costs and benefits could be used to improve decision making: "Wise decisions affecting the environment and sustainable development require an understanding of the relative costs and benefits of action and inaction .... An assessment of the current state of knowledge will be prepared to identify best practices." That is the focus of this study. Two other studies in this Report complement this study, one providing practical guidance for performance measurement for sustainable development (Chapter 8) and the other examining strategic decisions for sustainable development (Chapter 5).

7.13 In a distinct but parallel initiative, Agriculture and Agri-Food Canada had begun to implement an environmental management system and had identified several needs, including the need to define baseline reference measures for physical operations. Seeing the advantages of collaboration, the Commissioner and Agriculture and Agri-Food Canada agreed to work jointly on approaches to track progress toward sustainable development. The resulting effort went beyond the original intention to develop practical methods and tools (for accounting for environmental progress). We focussed on the facilities and materiel management of Agriculture and Agri-Food Canada, rather than its policies and programs. In conjunction with the Department, we reviewed current practices and identified some of the key opportunities and constraints.

7.14 The review of Agriculture and Agri-Food Canada's situation was complemented by an analysis of emerging practices in other organizations in the private and public sectors. The study also benefited from collaboration with an ad hoc working group from other federal departments interested in managing the environmental effects of their operations. Both the analysis of other organizations and the collaboration with different departments helped us understand what is feasible for federal departments.

7.15 By adopting this pragmatic approach, we have laid the foundation for a fuller accounting of the environment and, from there, for an improved decision-making process. This longer-term goal will not be accomplished quickly. The Accounting for Sustainable Development Project, planned to be

carried out over the next five years, is intended to help the government develop better tools to support implementation of sustainable development. While the focus is on information for better decisions, the same information could and should be used for reporting on results.

7.16 The three long-term objectives of the project are:

- first, to help departments with custodial responsibilities to build the tools necessary to integrate considerations of environmental and social effects into capital and operating decisions;
- second, to help departments with policy responsibilities to build practical, cost-effective tools to integrate information from diverse data bases into decisions on policies with significant environmental, social and economic effects; and
- third, to help departments create the baseline reference information necessary for credible, relevant and consistent measures of their sustainable development performance.

7.17 Thus this chapter is more of a progress report than a final summing up of our work in this area. In **About the Study**, we provide more details on how this first phase of our five-year project was carried out.

Study Findings

Bringing Operations into Harmony with Nature

The physical operations of Agriculture and Agri-Food Canada lead to several environmental challenges

7.18 **Extensive operations.** Agriculture and Agri-Food Canada owns about 1,800 buildings on 33,000 hectares of land, occupies 81,000 square metres of office space and operates numerous and varied research establishments, farms and laboratory complexes. Two branches of the Department, the Research Branch and the Prairie Farm Rehabilitation Administration, together operate more than 10,000 pieces of farm equipment and other vehicles. The Department also operates 87 community pastures covering more than 900,000 hectares. The responsibility for these operations is very decentralized.

This study is the first phase of a five-year project.

7.19 **Environmental challenges.** The duration, size and diversity of Agriculture and Agri-Food Canada's physical operations create three different kinds of environmental management challenges. The first is what might be termed "legacy" issues — issues resulting from past operations (for example, contaminated sites, underground fuel storage tanks) or use of substances that are being phased out, such as polychlorinated biphenyls (PCBs) and ozone-depleting substances.

7.20 The second category of environmental management issues includes those that are a normal outcome of day-to-day operations — for example, issues related to fuel consumption, heating-plant boiler emissions, waste water, or solid waste disposal. This category may also include: the use of an installation for program needs, resulting in laboratory fume hood emissions; or the use and handling of chemicals such as pesticides, with the risk of spills or contamination. The Study Management System and environmental assessment are used to ensure that studies are undertaken efficiently and in line with environmental concerns.

Physical operations create three different environmental management challenges.

7.21 The final category of environmental issues relates to new projects or initiatives. For instance, construction of a new facility or purchase of new vehicles may cause adverse environmental impacts, such as those assessed under the *Canadian Environmental Assessment Act*. These impacts may be mitigated by construction

of energy-efficient buildings and selection of alternative-fueled vehicles.

The Department is moving to a more proactive approach to environmental management

7.22 The managerial challenge. The Department's environmental challenges must be addressed by facility managers, many of whom are faced with reduced capital and operating funds as well as other new departmental initiatives. Some departmental managers have been looking for ways to improve environmental performance while reducing the cost of utilities, materials and supplies. During 1997–98, the cost of these items was expected to exceed $40 million.

7.23 An initial focus on high-risk environmental issues. Through the early 1990s, Agriculture and Agri-Food Canada focussed on managing contaminated sites, replacing underground storage tanks, constructing chemical storage facilities and addressing other high-risk environmental areas. By 1994, Agriculture and Agri-Food Canada had tackled most of these problems and had expanded its environmental agenda beyond its earlier focus and identified the advantages of a more systematic and proactive approach.

7.24 Adoption of an environmental management system. In response to these and other pressures, Agriculture and Agri-Food Canada decided to develop and implement an environmental management system (see Appendix A — Glossary). The Department made a public commitment to this initiative in its sustainable development strategy (Exhibit 7.2).

7.25 A commitment to the greening of government operations. In November 1995, the Department established an Environmental Management System Task Force to co-ordinate development of the system. The Task Force had representatives from all branches: Human Resources, Research, Food Products and Inspection, Policy, Review, Communications, Market and Industry Services, Corporate Services and Prairie Farm Rehabilitation Administration. The initial focus of the Task Force was to clarify the roles and responsibilities of all branches in the development of the system, and identify gaps in the existing environmental management practices and the resulting risk to the Department.

7.26 Need for environmental policy identified. In its initial review, the Task Force concluded that the Department had a somewhat fragmented approach to environmental management and identified areas for improvement. This review used the *Environmental Management System Self-Assessment Guide* developed by the

Exhibit 7.2

Agriculture and Agri-Food Canada's Commitment to an Environmental Management System

The sustainable development strategy tabled in April 1997 articulates the Department's vision for abundant food and a healthy environment. One of the priorities in the strategy is to "integrate environmentally responsible approaches into the management of the physical operations of the department by:

- meeting or exceeding federal environmental regulations;
- using best practices;
- developing and implementing an Environmental Management System (EMS)."

The Department made the following commitment for 1997–98:

"An EMS will provide the framework for Agriculture and Agri-Food Canada to:

1. apply environmental stewardship to its operations and to monitor its environmental performance; and

2. ensure a high level of environmental performance and accountability in departmental operations, such as construction and operation of buildings, fleet management, and land utilization."

Source: *Agriculture in Harmony with Nature*. Agriculture and Agri-Food Canada, 1997

Office of the Auditor General and the Federal Committee on Environmental Management Systems. The Task Force identified the need:

- to develop an environmental policy with objectives and targets;
- to establish a better organizational structure for environment-related activities with clear roles and responsibilities; and
- to define environmental risk areas and legal requirements.

7.27 The Department identified some of the key risk areas including hazardous waste generation, incinerator use, PCB use and phase-out, laboratory operations, effluent treatment, and pesticide use.

7.28 A Steering Committee of Assistant Deputy Ministers was established to align the proposed environmental management system with other departmental activity and to define accountability for environmental performance. The objective of the Steering Committee was to streamline the implementation process.

7.29 A shift in focus to implementation. The Steering Committee approved the environmental policy in April 1997. With that approval, the focus shifted from policy to the support tools for implementation of the environmental policy. Training was provided across the country for facility managers to help them analyze the environmental aspects of the Department's operations. The Task Force also recognized some key principles:

- Policy, by itself, is not enough — managers want tangible tools.
- Little successes are important.
- Continued functional support is needed from a central group.
- Increased communication helps information exchange.

7.30 Given the decentralized nature of the Department, the Steering Committee decided to take a "bottom-up" approach by having facility managers set their own environmental objectives and targets. The objectives and targets will be set in the context of the departmental sustainable development strategy and environmental management system. Regional centres had to be heavily involved in the process to build support for implementation.

Senior management is committed to getting the environmental management system in place.

7.31 To help managers assess the potential environmental risks, the Task Force developed its Environmental Management Review guide. This guide contains a process for managers to assess the environmental aspects of their operations, to evaluate the environmental risks and liabilities, and to set environmental objectives and targets. The resulting environmental agenda will allow for comprehensive monitoring of progress and management performance for specific physical operations. During 1998, responsibility centre managers will complete the Environmental Management Review of their physical operations.

7.32 The Department recognized the need for elementary measures of energy use, waste, and water use that could be used to set goals, measure progress and identify opportunities for reducing both costs and environmental degradation due to, for example, emissions of toxic substances to the atmosphere. To support this more proactive approach, the Department wanted to make a link between its financial accounting system and its environmental management system.

The Department has made progress in managing its high-risk environmental issues.

Some successes have already been achieved

7.33 The Department has made progress in managing its high-risk environmental issues. Projects ranging from energy audits to major building retrofits and replacement of underground storage tanks have been carried out at some individual sites and these will

improve environmental performance. Senior managers interviewed recognized the value of such successes in generating savings as well as providing examples for other managers.

7.34 In one example, Agriculture and Agri-Food Canada's Dairy and Swine Research and Development Centre (Lennoxville) has purchased and will continue to assess a Neighbourhood Electric Vehicle for use on research station property. The direct acquisition and operation costs of the vehicle are estimated to be 50 percent less than those of a conventional internal combustion vehicle. The vehicle has a battery life of more than eight hours and can reach a speed of 40 km/hour.

Obtaining and using information is seen to be part of good management.

7.35 A second example points to the possible environmental benefits from more efficient use of existing resources. Following two reviews of their fleet management, the Prairie Farm Rehabilitation Administration and other branches of the Department decided to pool their vehicles within their Regina headquarters. The centralized vehicle pool, operating on a cost recovery basis, has dropped from 28 to 22 vehicles and has allowed ongoing cost reductions estimated at $25,000–$30,000 per year.

7.36 As a final example, the Vineland station has conserved energy through a co-generation project that was supported by the Federal Industrial Boiler Program (Exhibit 7.3). The project demonstrates what can be accomplished even in older facilities.

Managers need benchmarks and consistent measures to track environmental performance

7.37 **Assessing the needs of managers.** We observed a diverse set of operational issues, ranging from containment of deadly animal viruses to management of very large refrigeration units; however, we also found some common themes. Managers at the facilities visited share an emphasis on reducing and containing variable costs — that is, costs that fluctuate with different levels of activity. In several cases, reducing these costs has led to a smaller environmental impact from operations (for example, fewer emissions to the air).

7.38 To evaluate their performance and to make good planning decisions, managers need appropriate information. Given that each research facility is unique, comparisons over time may be most meaningful. Environmental aspects of some operations may be similar enough that it may also be useful to make comparisons against benchmarks. These benchmarks may be internal to the Department, comparing facilities against one another, or demonstrating progress toward departmental environmental goals.

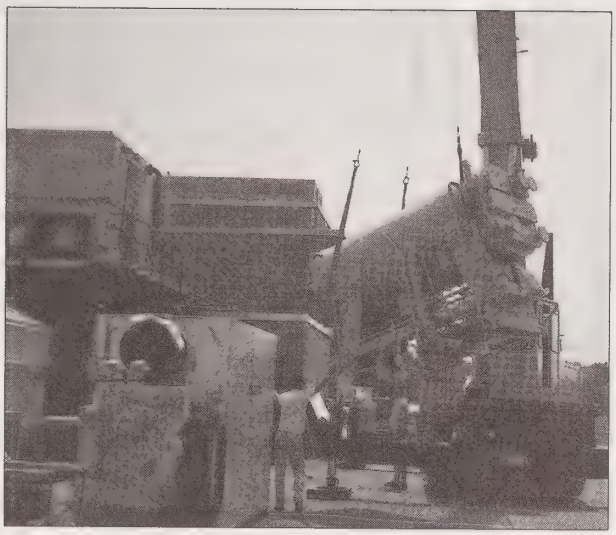
Opportunities exist to reduce costs and environmental impacts

7.39 Managers interviewed have several opportunities for effectively using information about environmental performance. Some of this information could contribute to successful implementation of the departmental environmental management system. However, managers also point to some constraints due to the effort of collecting and using this information.

7.40 **Some information is available.** The Department is in the early stages of implementing its environmental management system; some pieces are in place, and others are slated for implementation by 1999. For example, the Department has provided support to managers through the Environmental Management Review guide, an intranet site and training workshops. Much of the basic information on the environmental aspects (for example, amount of resources used, associated costs) is already being collected, filed and tracked, and is being used in a limited way in operational decisions. For instance, managers monitor energy bills for surcharges related to

Exhibit 7.3

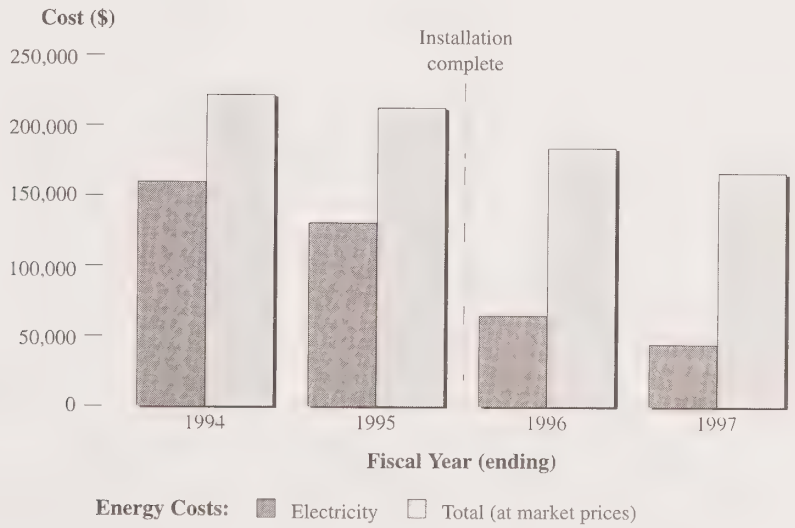
Implementing a Co-Generation System at Vineland Research Station





In 1993, the Federal Industrial Boiler Program conducted a co-generation feasibility and life-cycle costing study for Agriculture and Agri-Food Canada's Vineland Research Station in southern Ontario. Based on the results of the study, the Department agreed to transfer approximately $1.5 million to the Program for installation. The Program managed the one-year project to design, supply, install and commission a natural gas-fired 260 kW co-generation system, an absorption chiller and a new heating plant with two new boilers and ancillary equipment. The installation was completed in March 1995.

The project was initially estimated to save the Department approximately $100,000 per year and reduce the facility's emissions of CO_2 and NO_X by a projected 40 percent and 60 percent, respectively. The expectations are that the costs will drop further now that operating conditions have been optimized. The actual costs are shown below.



Source: Government of Canada, 1996

electricity use during peak periods. Obtaining and using this information is seen to be part of good management. In this context, one manager downplayed the possible data collection burden: "It's only a burden for those that aren't managing properly."

7.41 Some managers commented that not all information is worth collecting. The reasons given range from the source of the inputs (for example, in some instances the volumes and costs for self-supplied water are not easily estimated) to the size of facilities (for example, the electricity use at individual community pastures is so small and unchanging that it is not worth tracking separately). In some cases, the resources required to obtain the information are not worth the cost reduction and overall environmental benefits.

7.42 Potentially large energy cost reductions. Energy costs are a major contributor to total operating costs. The way energy use is managed at each facility depends on the rate structure each operation faces; it may differ from one municipality to another. Substantial reductions in energy costs have been achieved at some facilities and more are being sought. Across facilities, managers have not yet taken a systematic approach to evaluating energy use or potential savings. This systematic evaluation will be part of the departmental Environmental Management Review of the responsibility centres to be completed during 1998. In the face of fiscal restraint, managers at the facilities visited recognize the need to identify opportunities that reduce pollution and financial costs (for example, through lower energy costs).

In the face of fiscal restraint, managers at the facilities visited recognize the need to identify opportunities that reduce pollution and financial costs.

7.43 Support from facility managers. The managers interviewed are clearly interested in doing a good job and are committed to environmental stewardship. They also speak of the potential value of sharing information among sites (and among departments) on more effective environmental management, such as innovative energy practices.

There are some constraints to reducing costs and environmental impacts

7.44 Information collection effort. Obtaining any information requires a certain collection effort and so should be directly useful to facility managers to evaluate environmental performance. The new financial information system for Agriculture and Agri-Food Canada will need to be flexible enough to build in environmental accounting information requirements and, therefore, to facilitate environmental performance reporting.

7.45 Limited financial resources. The funding for suitable environmental projects is limited by the available departmental resources and, in some cases, is secondary to program decisions. The payback periods for some energy-saving projects are estimated to be less than five years, but funds are not available to implement these projects because of other departmental priorities. The funding is further complicated because there are two sources of money (facility/region and departmental headquarters) that must be co-ordinated for some larger projects. This lack of capital may be partially offset by additional outside funding, which provides an impetus to upgrade or reconfigure existing facilities.

7.46 Perceived disincentives. Another important limitation is that managers who implement environmental projects that result in cost reductions may not perceive an increased availability of funds. Providing financial incentives could be an effective tool to promote the environmental management system within the Department.

7.47 As an example of how incentives can make a difference, the Prairie Farm Rehabilitation Administration is currently a tenant in a Public Works and Government Services Canada building.

The Administration is part of a pilot project to assess the implications of being a "reimbursing client". It will manage its own facilities and has an incentive to achieve savings by collocating with other organizations, sharing services and common facilities, and cutting costs for waste, water and energy. Long-term accommodation management strategies also provide opportunities for incorporating environmental concerns.

7.48 Lack of clarity regarding possibilities for "green" procurement. There is an interest and willingness on the part of some managers to implement environmentally beneficial procurement measures as long as the measures do not affect their costs substantially. Managers have several suggestions for measures that could be used to implement such procurement practices and to track progress (for example, recycled paper as a proportion of total paper purchases). The managers we interviewed advised us that they need more information in the form of practical guidelines on how to implement departmental policies for green procurement. Contract and purchasing managers wanted to know how much of a premium was acceptable for a product or service with significantly smaller environmental impacts.

7.49 Other external constraints may also limit the effectiveness of procurement initiatives. The availability of alternative suppliers is an issue for procurement outside major urban areas. The many minor decisions when making purchases with credit cards are not cost-effective to track individually. Training programs and audits could play an important role in addressing such obstacles.

7.50 Limited information on environmental aspects of physical operations. There are two main types of environmental management challenges for the operations we considered —those related to inputs or outputs for the facilities such as solid waste; and those related to the inventory of certain types of structures or substances, such as underground storage tanks. Responsibility centres are currently monitoring their activities, but most are not systematically tracking the consequences for third parties, such as the effects of waste water on water quality outside Agriculture and Agri-Food Canada properties. The centres are also not reporting the results of their monitoring activity. Existing budgetary and accounting systems are mostly silent on environmental impacts and physical consumption. Baseline information being collected through the Environmental Management Review will address some of these data gaps.

Other federal departments face similar opportunities and constraints

7.51 Through this study, we had the opportunity to work with an ad hoc working group that includes members of the Federal Committee on Environmental Management Systems. Participants are from several departments that have significant custodial responsibilities (Agriculture and Agri-Food Canada, Environment Canada, Department of National Defence, Natural Resources Canada, Public Works and Government Services Canada, and Treasury Board Secretariat). The group provided a way of comparing the experience of Agriculture and Agri-Food Canada with that of other departments. Discussions supported the conclusion that the opportunities and constraints are similar for the participating departments. Work with this group allowed us to evaluate what degree of consistency could be achieved among departments in the way they collect and report information.

Managers need more information on how to implement policies for green procurement.

7.52 This working group set itself the task of developing common environmental performance measures. After discussion, group members selected eight environmental aspects for detailed consideration: energy use, water use, solid waste, hazardous materials, storage tanks, spills, ozone-depleting substances and

procurement of environmentally responsible products. These aspects were chosen on the basis of their potential for environmental impacts, their broad applicability to the operations of different departments and the objective of minimizing overlap with the work of other interdepartmental committees.

7.53 Comparison of the approaches taken by each of the custodial departments led to the selection of common performance measures for six of the eight aspects (Exhibit 7.4). For the other two aspects, the proposed measures are still under consideration. The measures were chosen to facilitate useful comparisons among facilities and departments. Some departments may choose to collect and report additional information, such as total energy use, and may also vary the weight they attach to particular measures in their decisions.

7.54 Some departments have already begun to use this kind of information to achieve cost reductions. One recent study estimated that the net savings

Exhibit 7.4

Proposed Common Measures for Reporting Environmental Performance

Environmental Aspects	Proposed Environmental Measures		Remarks
	Office Buildings	Other Facilities	
Water consumption	Cubic metres per m^2 (floor area) Dollars per year	Cubic metres per year Dollars per year	
Energy consumption	Gigajoules per m^2 Dollars per year	Gigajoules per year Dollars per year	
Petroleum products and allied petroleum products storage tanks	Number of tanks registered Percent in compliance with the *Canadian Environmental Protection Act*	Number of tanks registered Percent in compliance with the *Canadian Environmental Protection Act*	Performance may be expressed in absolute and percentage terms
Non-hazardous solid waste	Kilograms of waste going to landfill per person year Percent of waste diverted from going to landfill per year	Tonnes of waste going to landfill per year Percent of waste diverted from going to landfill per year	Performance could be expressed in absolute terms and in relation to target of 50 percent reduction from 1988 level (190 kg per person per year)
Ozone-depleting substances	Number of reportable releases per year Kilograms of reportable releases per year	Number of reportable releases per year Kilograms of reportable releases per year	Reportable as per existing and anticipated regulations
Spills	Number of reportable spills per year	Number of reportable spills per year	Reportable as per existing and anticipated regulations

Source: Ad hoc committee discussions

government-wide of implementing energy conservation measures could be $29 million per year by 2005.

7.55 While the focus of this project was on information for decision making, the members of the working group recognized that the same measures could also be used for reporting on results. For example, the measures in Exhibit 7.4 could be used for reporting compliance with regulations on storage tanks. As another example, a performance measure for energy use could be developed from the ongoing monitoring data. A description of how to translate and apply this baseline information is given in Chapter 8 of this Report.

Emerging Practices for Integrating Information Provide a Road Map

7.56 To understand what might be feasible for federal government departments in terms of collecting, using and reporting environmental information, we assessed the emerging practices in other public and private sector organizations. We focussed on organizations with well-developed environmental management and reporting approaches.

Common decision framework emerges from our surveys

7.57 Our interviews revealed that there are some common strategic, operational and control decisions confronting the organizations visited. We observed that these decisions were based on factors such as perceptions of shareholder equity, market advantage, public pressure, expectations of future environmental legislation and regulations, and changing views of corporate accountability. A framework for these decisions is provided in Chapter 5 of this Report.

7.58 **Strategic decisions.** A major question was "Where do we want to be positioned relative to other firms on the environment?" All organizations visited had decided, during the past five to seven years, to become environmental leaders. They had all moved from reacting to environmental issues to implementing a form of comprehensive environmental management that included a focus on pollution prevention. Each organization had made different decisions on how fast and how far it wanted to move, and the cost that it was prepared to incur to make the journey.

7.59 **Budgeting decisions.** All organizations visited had to make decisions about changes in operations, products and processes. They had to make decisions on such matters as major retrofits of buildings, heating and lighting systems and more minor capital investments. Managers wanted information to set objectives and targets, to monitor progress against corporate environmental goals, and to evaluate the effectiveness of their activities.

7.60 **Control decisions.** All organizations interviewed recognized that their challenge was managing changes — changes in the corporate culture, in the way they did business, or in the attitude of employees. They needed to know whether they were successful in making these changes. From an environmental perspective, senior management and boards of directors were concerned about compliance and "due diligence" with respect to applicable environmental laws and regulations.

What gets measured, managed and rewarded gets done faster and better

7.61 From the interviews and survey of practices in various organizations, several clear lessons emerged on how to implement an integrated information system. (Some of the same messages have been highlighted in Chapter 8 of this Report and in previous work of the Office of the Auditor General.)

Measures for reporting on environmental performance could also be used for reporting on results.

Effective environmental information systems are built into the existing planning and cost accounting systems.

A chief executive officer made a commitment to reduce atmospheric emissions by 90 percent.

- **Measure results.** Environmental performance that is measured, managed and rewarded continually improves.

- **Ensure clear accountability.** There are several key prerequisites for continuous improvement: unrelenting support of senior management; an effective environmental champion/ controller with authority within the organization; continuous demonstration of tangible benefits through quantification; clear accountability for results; and recognition, rewards and sanctions.

- **Use existing systems.** Effective environmental information systems are built into the existing business planning and cost accounting systems.

- **Focus initially on cost reduction.** The key relevant steps for comprehensive environmental management are: realizing cost reduction opportunities; changing or coping with environmental and business risks; closing compliance gaps; reducing environmental liabilities; and implementing physical measures for aspects such as waste and energy use.

- **Match the tools to the planning horizon.** Accounting becomes more sophisticated as an organization's planning horizon and perceived social accountability expand.

- **Integrate data.** At every decision point, there is a need to integrate financial and non-financial information about environmental effects.

- **Use environmental performance as a competitive advantage.** Key motivators for private sector organizations are customer satisfaction and corporate image. This will eventually lead to an increase in shareholder equity. Initially, the environment is perceived as a burden; subsequently, it is perceived as an opportunity.

Many organizations are already reporting on their environmental performance

7.62 Some organizations have made significant progress in reporting on their environmental performance. For example, a large multinational corporation prepares an annual statement translating its environmental performance into financial terms. The environmental management group tracks both the costs and savings due to the corporation's environmental programs for the current year and for previous years (Exhibit 7.5). This report is used to improve environmental programs for the corporation as a whole and for individual facilities.

7.63 The organizations we interviewed have moved beyond reporting against regulated standards (for example, for atmospheric emissions). They collect information on the broader implications of their environmental management system and, in many cases, track effects on their local communities. However, in general, even the leading organizations we reviewed are not translating all their environmental impacts into monetary terms. They use a combination of financial and non-financial measures to track their overall environmental performance.

7.64 In some cases, organizations are using this information simply to manage the environmental dimensions of their performance. For example, one Canadian resource company tracks water consumption for several different uses, including faucets, toilets and air-conditioning equipment. Another Canadian company separates its solid waste into streams for cardboard, paper, metals, plastic, glass, wood, toner cartridges, wire and cable, and tracks each stream individually. In another case, a chief executive officer looked at his company's atmospheric emissions of toxic substances with other sources of pollutants and made a commitment to reduce

Exhibit 7.5

A Corporate Environmental Financial Statement

	1996	1995	1994
Environment Costs			
Costs of Basic Program			
Corporate environmental affairs and shared multidivisional costs			
Auditors' and attorneys' fees			
Corporate environmental engineering/facilities engineering			
Divisional/regional/facility environmental professionals and programs			
Packaging professionals and programs for packaging reductions			
Pollution controls – operations and maintenance			
Pollution controls – depreciation			
Total Costs of Basic Program			
Remediation, Waste, and Other Response Costs*			
Attorneys' fees for clean-up claims, notices of violation			
Settlements of government claims			
Waste disposal			
Environmental taxes for packaging			
Remediation/clean-up – on-site			
Remediation/clean-up – off-site			
Total Remediation, Waste, and Other Response Costs			
TOTAL ENVIRONMENTAL COSTS			
Environmental Savings (Income, Savings and Cost Avoidance from 1996 Initiatives)			
Ozone-depleting substances cost reductions			
Hazardous waste – disposal cost reductions			
Hazardous waste – material cost reductions			
Non-hazardous waste – disposal cost reductions			
Non-hazardous waste – material cost reductions			
Recycling income			
Energy conservation – cost savings			
Packaging cost reductions			
TOTAL 1996 ENVIRONMENT SAVINGS			
As a Percentage of the Costs of Basic Program			
Summary of Savings			
Total 1996 Environmental Savings			
Cost Avoidance in 1996 from Efforts Initiated in Prior Years Back to 1989			
TOTAL INCOME, SAVINGS AND COST AVOIDANCE IN REPORT YEAR			

*Proactive environmental action will minimize these costs.

emissions by 90 percent, well below regulatory limits at the time.

7.65 Private sector organizations have used information about performance as a source of competitive advantage. One corporation screens each possible new product for its sustainable development implications as it decides whether to bring the product to market. It is not just private sector organizations that have benefited from using this information; municipalities have used their environmental performance as a way of attracting businesses and investment.

7.66 Another recent survey of private sector organizations concluded that, overall, the use of this kind of sustainable development performance information was limited, but had the potential to grow rapidly.

A gap exists between the leading public and private sector organizations

7.67 Our survey of private and public sector organizations revealed a wide range in environmental performance within the two sectors as well as a gap between the leading organizations in both sectors. Some leading private sector organizations have designed and implemented more sophisticated and comprehensive reporting and management systems than any we surveyed in the public sector. Other private sector organizations have poor environmental track records. Some lack the sophistication or resources to undertake proactive approaches to managing their environmental agendas, and some do not have the public profile that appears to provide a spur to good performance.

7.68 One partial explanation for the difference we found between the public and private sector organizations may be the focus of the public sector on the policies and programs they are undertaking rather than on their operations. For example, the sustainable development indicators employed by several public sector organizations are weighted toward measures for the entire society rather than for their internal operations.

7.69 It appears that Canadian federal departments are at a similar stage as most other public sector organizations we surveyed. Thus the Government of Canada has an opportunity to demonstrate leadership in developing and using analytical tools for collecting and integrating environmental information and then using it in decision making.

Accounting tools become increasingly sophisticated as organizations plan for the future

7.70 From the survey, we observed a sequence of approaches to using information in decision making for operations (Exhibit 7.6). This sequence appears to hold for both private sector and government organizations. It begins with a situation in which managers simply react to environmental issues, using the traditional accounting tools and tracking the costs of spills and fines. In the next stage, organizations focus on compliance and use information about remediation costs and costs of pollution control to make decisions. Some of the leading organizations we surveyed have moved to the third stage where the emphasis is on pollution prevention. Their information needs have grown to include the costs of the environmental management system, and tracking the benefits of reduced consumption and waste reduction; in some cases, this is done separately by activity to ensure accountability. In the last stage, a full range of information is brought to bear on decisions — decisions not only about immediate operations but also about possible long-term liabilities and benefits for future generations. At each step, the range of information expands and the planning horizon is extended into the future. (See Appendix A, Glossary, for definitions of the terms in Exhibit 7.6, and Chapter 5 for a fuller description of these stages.)

Exhibit 7.6

Evolving Accounting Needs in the Journey toward Sustainable Development

	Reacting	Compliance	Comprehensive Management (and Eco-Efficiency)	Sustainable Development
Focus of Strategic Decisions	Ad hoc response	Due diligence	Pollution prevention	Business opportunities
Focus of Response to Environmental Issues	Past liabilities	Present liabilities	Short-term future liabilities	Long-term future liabilities
Accounting Approach	Standard accounting	**Accounting for better environmental management**		**Accounting for two generations**
Financial Information Needs	Costs of spills, fines, clean-ups, etc.	Costs of remediation, costs of meeting regulations, financial benefits of avoiding unplanned liabilities and risks	Costs of environmental management system, financial benefits of preventing pollution and reducing consumption Costs by product and activity	Costs of long-term liabilities Benefits of new opportunities
Non-Financial Information Needs	Ad hoc reporting on infractions	Gap between current practice and regulations, progress reports, emissions data, risk assessments	Corporate goals and targets, performance results	Environmental, economic and social impacts, costs and benefits from activities Distribution of costs and benefits
Accounting Practices and Tools	Standard accounting practices	Environmental audits, environmental and business risk assessments	Activity-based costing, environmental performance evaluation, life-cycle assessment, material balance analysis	Full cost accounting, social performance measures, sustainability assessments
Reporting Format	Standard financial report	Memos on financial report, possible environmental report	Environmental report	Sustainable development report (integrated financial and environmental report)

What Is Feasible for Federal Departments?

The experience of other organizations is transferable

Federal departments may be able to learn from other organizations.

7.71 Basic principles apply. Based on our work at Agriculture and Agri-Food Canada and with the ad hoc working group of departments with custodial operations, we concluded that most, if not all, of the principles and practices described in the previous section apply to government operations. Federal departments may be able to learn from other organizations.

7.72 Motivation and incentives are different. The motivation for federal departments to expend effort on their environmental performance differs from their private sector counterparts. The public sector mandate is broader and departments are expected to balance competing interests and objectives. This provides a greater opportunity to bring together a wide range of information and to make decisions that more fully integrate the available perspectives. It also increases the demand for public accountability and reporting. However, as previously noted, the incentives may not be in place for public sector managers to act aggressively on the available opportunities. We believe it is important for federal departments to move toward more fully accounting for the environmental implications of their activities.

An information system could help identify potential unrealized cost reductions and help share best practices.

7.73 Similar environmental challenges. Federal departments and multinational companies may face similar challenges with respect to the environmental aspects of operating offices, managing fleets and conducting laboratory research. Thus the ways that corporations collect and manage information on their environmental performance may also be useful to government departments.

An opportunity exists to strengthen implementation of environmental management systems

7.74 Departments with significant custodial operations are turning to environmental management as a way to manage risks in a credible, cost-effective manner consistent with the principles of "due diligence". Previous co-operative work between the Office of the Auditor General and the Federal Committee on Environmental Management Systems led, for example, to the *Environmental Management System Self-Assessment Guide*. From our discussions with Agriculture and Agri-Food Canada and other departments, a tighter link between financial and environmental information and the way that information is reported could further strengthen implementation of environmental management systems.

7.75 There are three main advantages to an information system that links an organization's environmental management system and its accounting system:

- Such an information system could help identify potential unrealized cost reductions and help share best practices. During our brief visits to Agriculture and Agri-Food Canada facilities, examples of possible cost reductions were identified, including the use of smaller, modular refrigeration units to reduce the need for expensive full-size backup systems.

- Financial data could complement existing information on "legacy" issues such as ozone-depleting substances, storage tanks, contaminated sites and PCBs, and help departmental managers estimate future remedial costs and set priorities.

- Integrated information could help make decisions about departmental goals and objectives and provide a basis for reporting progress against those.

Information tools can capture relevant data for decision makers

7.76 Based on discussions with facility and senior departmental managers, we designed some ways of summarizing the relevant environmental information. The format and content are consistent with the measures identified by the ad hoc working group. The prototype has been designed to be applicable to Agriculture and Agri-Food Canada and other government departments. The proposed prototype design will need to be further refined in collaboration with departments; however, we expect similar reports will be used when departments report on their environmental performance.

7.77 **Design principles.** In designing the information tools for managers, we were guided by six principles:

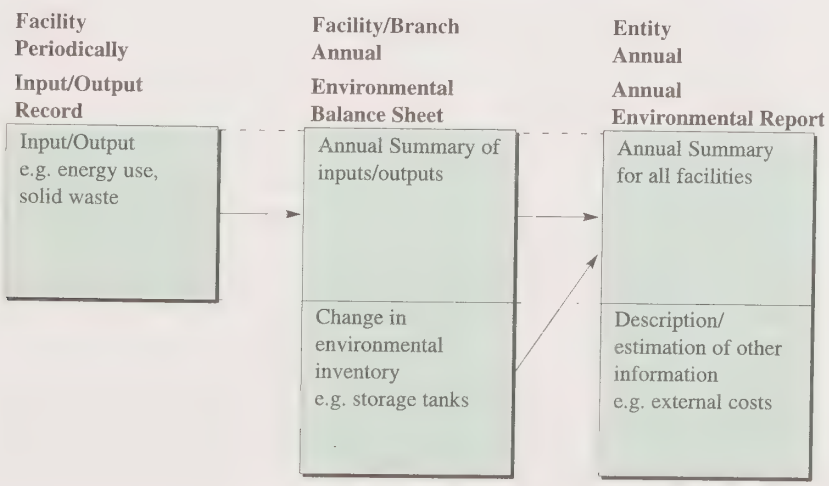
- The tools should use information that is presently available.
- The total information collection burden should be minimized.
- The information should be appropriate to the decisions that may be made.
- The individual facilities will likely have more accurate and easily verified information about their own facilities.
- The tools should tie into the existing financial management system.
- The structure of the tools and the information should reflect their two main uses: decision support and reporting.

7.78 Based on the information we obtained, and building on the key principles, we identified the need for three categories of reports: an input/output record, an environmental "balance sheet", and an annual environmental report. The relationships between these reports are illustrated in Exhibit 7.7. The possible contents of the environmental balance sheet are presented in Appendix B. Additional detail will be required for the periodic reports at each responsibility centre.

7.79 **Input/output record.** This report would be the least aggregated and would summarize facility-specific costs and quantities periodically. It would be analogous to an income statement and used for recording additions and deletions in both financial and non-financial terms. The report would rely almost exclusively on information that is already contained in invoices for such items as electricity,

Exhibit 7.7

Links between Reports of Environmental Information



natural gas and water use. It would be used for evaluating performance on inputs, such as fuel, and outputs, such as waste water.

7.80 Environmental balance sheet. The periodic reports would be rolled up into a yearly environmental balance sheet for each facility or branch. This would differ from a traditional accounting balance sheet in that it would provide totals for the inputs and outputs, and would capture the "inventory items", such as contaminated sites, storage tanks, and ozone-depleting substances. This report would be used primarily to summarize the status of environmental management and to report progress over time, against standards, objectives or targets. For internal use, it would be helpful in making capital decisions at the branch level. The report would include a comparison with last year's figures and an explanation of differences. For example, an increase in energy costs could be due to high summer temperatures and the resulting need for air conditioning.

7.81 Annual environmental report. The final and most aggregated report would be produced for the entire department and would summarize the status of environmental management across all facilities. Information from this report could be used for a government-wide "roll-up". In addition to the summary of inputs/outputs and inventory items, this report could describe cost reduction programs and, possibly, measures of external costs or benefits. For example, the energy use information for both fossil fuels and electricity could be used to generate an estimate of greenhouse gas emissions from departmental operations. This report would be used by senior management in the department to assess progress against departmental objectives and targets, to identify environmental priorities, and to allocate resources. Part or all of this report could be used for public reporting, for example against sustainable development strategy goals, perhaps as part of the annual Performance Report.

7.82 "Roll up" procedures. Corporate information on compliance with applicable environmental, health and safety standards will provide senior management with a key element of "due diligence". For operations and capital items, the information will provide a basis for future planning decisions — whether the goals are the minimization of total costs, or targets for environmental stewardship. The information tools described here represent an important first step in what could be termed "accounting for environmental management".

Next Steps on the Journey to Sustainable Development

7.83 Moving toward accounting for sustainable development. Based on our research, accounting for sustainable development may be defined as:

> an information tracking framework that integrates internal (private) and external (societal) costs and benefits, and supports evaluations of the short- and long-term consequences of activities and projects from environmental, social and economic perspectives.

7.84 We observed that, from the accounting perspective, there were essentially two phases of the journey to sustainable development: accounting for better environmental management and accounting for two generations (that is, considering the impacts on future generations).

7.85 A productive collaboration. This joint project between the Office of the Auditor General and Agriculture and Agri-Food Canada is a modest step on the journey. The Office's interest in promoting consistent and effective reporting to Parliament was combined with the practical experience of Agriculture and Agri-Food Canada and the other departments that participated in the ad hoc

working group. The project has laid the foundation for possible further work in several areas: refining the measures for consistent public reporting among departments; extending the set of common measures to include areas such as procurement and hazardous materials; and pilot implementation of the prototype reports for integrating financial and non-financial information.

7.86 **Future directions.** Other areas for possible future development include extending the implementation to other departments, expanding the government activities considered to include policies and programs, and enlarging the set of measures to include social indicators such as those relating to employment and health.

7.87 Over the long term, we expect this work to result in better environmental management. We also expect it to improve implementation of departmental sustainable development strategies. The integrated information generated by departments should help the Commissioner monitor departmental progress on sustainable development.

Conclusion

7.88 Having and using environmental information is part of effective management. Managers need to be able to monitor ongoing operations, and to make short-term operational decisions as well as longer-term plans that could involve significant capital investments, such as to purchase major equipment or retrofit buildings. They also need to be able to manage their "legacy" issues.

7.89 The first step in integrating environmental information into decision making is making sure the data are available. We identified measurements that could be readily made, by Agriculture and Agri-Food Canada and by other departments, that would reflect considerations of sustainable development in departmental operations and would help in making better decisions. Cost reductions may be achieved by using some kinds of information; however, there are some important obstacles to be overcome. We expect that better decisions will contribute to better results.

7.90 Based on our review of the state of the art for integrating different kinds of information, we conclude that organizations face similar challenges and opportunities. Comparing leading organizations in the public and private sectors, it appears there are substantial opportunities for progress by federal departments and for taking advantage of the experience of other organizations.

7.91 The journey to sustainable development is a long road that will require patience, discipline and realistic expectations. We can help each other along the way by sharing our successes.

Agriculture and Agri-Food Canada's response: *Agriculture and Agri-Food Canada would like to thank the Office of the Commissioner of the Environment and Sustainable Development for the opportunity to participate in this valuable project.*

The study has provided the Department with a broad understanding of the implementation process of an environmental management system (EMS) in both the public and private sectors. As a result, the Department has a clear understanding of how implementation of an EMS will enable Agriculture and Agri-Food Canada to identify cost savings through reduced energy and material costs related to physical operations. Although it must be kept in mind that resources for EMS implementation will have to compete with existing priorities within the Department.

Agriculture and Agri-Food Canada looks forward to the opportunity to contribute to additional phases of this joint study.

The project has laid the foundation for possible future work in several areas.

About the Study

Objectives

This study is the first phase of a five-year project to assist government departments in developing decision support tools for integrating environmental, social and economic information.

The overall objective of this study was to demonstrate the practical feasibility of preparing a set of accounts for sustainable development. These accounts would be used to support decisions as departments make the transition to operations consistent with the tenets of sustainable development. There were three sub-objectives for this first phase:

1. to document the state of the art for integrating new information on environmental assets, costs and liabilities, as well as other information on environmental, social and community impacts (including jobs) with existing governmental financial and non-financial databases;

2. to design practical and implementable accounts to reflect considerations of sustainable development in the operations of departments; and

3. to support the implementation of prototype accounts for sustainable development in the context of the operations of a federal department.

Scope and Approach

This phase of the project combined three key activities. First, the study was deliberately focussed on a small part of the activities of a single government department — the custodial operations of Agriculture and Agri-Food Canada. Seeing the advantages of collaboration, the Commissioner and Agriculture and Agri–Food Canada agreed to work jointly on this project, with team members from both organizations.

We took a very practical approach to assessing the needs of managers for environmental information and the decisions they would make based on that information. We conducted a series of interviews with managers and departmental branch heads in Ottawa, reviewing their information priorities and identifying their key decisions.

We then conducted site visits and interviews at Agriculture and Agri-Food Canada facilities in several locations across Canada. The sites represent a mix of facilities of different sizes from two of the main operational branches (Research Branch and Prairie Farm Rehabilitation Administration) and the Canadian Food Inspection Agency. The Department suggested that these were well-managed sites. This was appropriate given the emphasis in this phase on identifying good, feasible and transferable practices. During each of the site visits, we met with operational managers. They described their facilities, the key environmental issues, the decisions they normally make and the information they would like to have to make those decisions.

Our second key activity involved working closely with an ad hoc working group composed of departmental representatives on the Federal Committee on Environmental Management Systems. The working group undertook a series of meetings, workshops and presentations, with the focus of its activity being environmental performance measurement for sustainable government operations. The group's perspectives, insights and work contributed substantially to this study.

As our third activity, we evaluated the emerging practices in both the public and private sector. Through literature and Web searches, we reviewed the experience with accounting for environmental management. A total of 27 private sector and 15 public sector organizations were considered in more detail. Specific information was then obtained from three organizations in each sector that were recognized for using leading practices. We drew on examples from North America, Europe and Australia, and then conducted in-depth interviews during site visits to several leading North American organizations. The intent of this survey was not to identify the very best organizations, but rather to select ones that had operations similar to the federal government, that represented a diversity of perspectives and that offered opportunities from which lessons could be learned.

Study Team

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Appendix A

Glossary

Accounting for Sustainable Development — an information tracking framework that (1) integrates internal (private) and external (societal) costs and benefits, and (2) supports evaluations of the short- and long-term consequences of activities and projects from environmental, social and economic perspectives. (Commissioner of the Environment and Sustainable Development)

Co-generation — utilization of the normally wasted heat energy produced by a power plant or industrial process, esp. to generate electricity. (Source: *Random House Dictionary of the English Language*)

Cost Avoidance — having someone other than the department deliver and pay for the service (for example, privatization). (Source: *Report of the Auditor General of Canada – May 1996*)

Cost Reduction — reducing the cost of providing the service through greater efficiencies, eliminating unnecessary procedures or, in some cases, discontinuing the service. (Source: *Report of the Auditor General of Canada – May 1996*)

Eco-efficiency — Eco-efficiency is reached by the delivery of competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life cycle, to a level at least in line with the earth's estimated carrying capacity. There are seven elements of eco-efficiency: reducing the material requirements for goods and services; reducing the energy intensity of goods and services; reducing toxic dispersion; enhancing material recyclability; maximizing sustainable use of renewable resources; extending product durability; and increasing the service intensity of goods and services. (Source: World Business Council on Sustainable Development)

Environmental Accounting — the identification, measurement and allocation of environmental costs, internal or external, or both, to provide information to internal or external users.

Environmental Aspect — element of an organization's activities, products or services that can interact with the environment. (Source: International Organization of Standardization)

Environmental Impact — any change to the environment, adverse or beneficial, wholly or partially arising from an organization's activities, products or services.

Environmental Management System — the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy. (Source: International Organization for Standardization) (In 1995, the Office of the Auditor General described an approach to environmental management system implementation applicable to the federal government.)

Environmental Performance — the results of an organization's management of its environmental impacts.

External Costs — from an environmental perspective, costs incurred sooner or later by parties external to an entity resulting from impacts on the environment caused by the entity's operations, products and services; an external environmental cost is a monetary value assigned to a decrease in benefit or a harm to society resulting from a decrease in environmental quality that has not been accounted for in a market-based transaction. (External costs, in general, extend beyond those attributable to environmental matters.)

Externality — a condition that may occur as a societal or environmental harm or benefit, even though no cost is assigned to it.

Full Cost Accounting

- integration of an entity's internal costs with external costs attributable to its activities, products and services.
- allocation of all of an entity's internal costs to products and processes, that is, allocation of indirect and fixed overhead costs as well as direct and variable overhead costs.
- method of accounting whereby all costs of exploring for and developing oil and gas reserves within a defined area are capitalized, subject only to the limitation that the costs so capitalized can be recovered by amortization against future revenues.

Integrated Decision Making — an approach to planning and decision-making that ensures progress on each and all of the dimensions – social, economic and environmental – of sustainable development. (Source: *A Guide to Green Government*)

Internal Costs — from an environmental perspective, costs an entity incurs to prevent, mitigate or remediate its environmental impacts, or from failing to take such steps, or costs related to obtaining governmental or societal permission to carry on activities that may adversely affect the environment. (Internal costs, in general, are all the costs an entity incurs, both those for which it is held responsible under normal commercial practices and legal requirements, and those it incurs at its own discretion.)

Life Cycle Assessment (LCA) — the process of compiling and evaluating the inputs and outputs and potential environmental impacts of a product throughout its life cycle from cradle to grave, that is, at all stages from resources, materials and energy inputs, through production processes, to outputs and their distribution, use and eventual disposal (as products, by-products, wastes or emissions).

Sustainable Development — development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (Source: *Auditor General Act*)

Source: *Full Cost Accounting from an Environmental Perspective*, CICA, 1997, except as otherwise indicated.

Appendix B

Environmental Balance Sheet

Annual Summary of Inputs / Outputs for a Facility

(Numbers are for illustrative purposes only)

Inputs / Outputs			Centre 1	Centre 2	Centre 3	Centre 4	Centre 5	Centre 6	Total
Water Consumption	Volume	purchase	31,568	37,881	25,254	22,097	63,135	15,784	195,719
		self-supply							
	Avg. Unit Cost		0.710	0.721	0.743	0.723	0.661	0.713	0.718
	Cost	demand	1,692	2,030	1,353	1,184	3,383	846	10,488
		supply	20,726	25,286	17,410	14,798	41,452	10,404	130,076
	Total Cost		**22,418**	**27,316**	**18,763**	**15,982**	**44,835**	**11,250**	**140,564**
	Prior year cost		22,477	26,972	17,981	15,734	44,953	11,238	139,355
Waste Water									
	Volume		77,174	92,608	61,739	54,021	154,347	38,587	478,476
	Avg. Unit Cost		0.962	0.978	1.010	0.981	0.962	0.966	0.974
	Total Cost		**74,243**	**90,576**	**62,364**	**53,010**	**148,486**	**37,270**	**465,949**
	Prior year cost		74,514	89,417	59,611	52,160	149,028	37,257	461,987
Energy									
Electricity 000kWh	Volume	purchase	10,738	12,886	8,590	7,517	21,476	5,369	66,576
		self-supply							
	Peak Demand		1,597	1,916	1,278	1,118	3,194	799	
	Avg. Unit Cost		0.449	0.450	0.458	0.451	0.446	0.447	0.449
	Cost	demand	259,536	316,634	218,010	185,309	519,072	130,287	1,628,848
		usage	188,027	221,209	147,472	129,038	368,681	92,170	1,146,597
	Tax + other		34,985	41,982	27,988	24,490	69,970	17,493	216,908
	Total Cost		**482,548**	**579,825**	**393,470**	**338,837**	**957,723**	**239,950**	**2,992,353**
	Prior year cost		481,742	578,090	385,393	337,219	963,483	240,871	2,986,798
Fossil Fuels GJ	Volume		51,533	61,840	41,226	36,073	103,066	25,767	319,505
	Avg. Unit Cost		2.42	2.44	2.49	2.45	2.42	2.42	2.44
	Cost	demand	43,725	52,470	34,980	30,608	87,450	21,863	271,096
		usage	68,636	83,735	57,654	49,006	137,271	34,318	430,620
	Tax + other		12,493	14,992	9,994	8,745	24,986	6,247	77,457
	Total Cost		**124,854**	**151,197**	**102,628**	**88,358**	**249,706**	**62,427**	**779,173**
	Prior year cost		126,450	151,739	101,160	88,515	252,899	63,225	783,988
Solid Waste									
	Volume	no. containers	6	7	5	4	12	3	37
		tonnage	8.2	4.5	3.2	1.6	7.8	4.1	29.4
	Frequency								
	Avg. Unit Cost	per container	105	107	110	107	105	106	107
		per tonne	245	229	258	285	224	264	251
	Total Cost		**2,639**	**1,780**	**1,376**	**884**	**3,007**	**1,400**	**11,086**
	Prior year cost		2,669	2,203	1,135	868	3,338	1,835	12,048
Hazardous Materials									
	Volume HazMat	no. containers by type	10	12	8	7	20	5	62
	Avg. Unit Cost	per container	190	193	200	194	190	191	192
		per tonne							
	Total Cost		**1,900**	**2,318**	**1,596**	**1,357**	**3,800**	**954**	**11,925**
	Prior year cost		1,458	1,749	1,166	1,020	2,915	729	9,037

(Numbers are for illustrative purposes only)

Inventory Items	Centre 1	Centre 2	Centre 3	Centre 4	Centre 5	Centre 6	Total
Landfill / Contaminated Sites							
no. of sites	1	1	1	-		1	4
no. of sites remediation outstanding	1	–			–	1	2
estimate of clean-up ($ 000)	138.3	40.5	101.2	27.2	2.2	35.5	344.9
Underground Storage Tanks							
no. of tanks	1	–	2	–	1	–	4
no. in compliance	1	–	2	–	1	–	4
no. abandoned	–	–	1	–	1	–	2
Above Ground Storage Tanks							
no. of tanks	–	1	1	1	1		4
Hazardous Materials							
quantity by type (details at facility)							
no. of trained employees	2	4	2	2	3	1	14
PCB storage	No	No	No	No	Yes	No	
Spills							
no. reportable spills	–	1	–	–	1	2	4
no. remediated		1	-		–	1	2
estimate of clean-up ($ 000)		25		–	-	500	525
no. of spills remediation outstanding	-	–		–		1	1
estimate of clean-up ($ 000)			–		–	30	30
Ozone-Depleting Substances							
no. releases over 100 kg	–	–	–	–	–	–	–
no. releases 10 – 100 kg	–	–	–	–	–	–	–
Procurement							
policy (Y/N)	Yes	Yes	No	Yes	Yes	No	
no. audits	–	1		–	–		1
no. individuals trained	2	3	1	2	1	3	12
no. contracts with environmental clause	1	4		2	1	5	13

Chapter 8

Performance Measurement for Sustainable Development Strategies

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Performance Measurement for Sustainable Development Strategies

Main Points

8.1 Through amendments to the *Auditor General Act* (1995), the federal government launched a new process for building environmental and sustainable development considerations into the mandates of departments. Establishing and using performance indicators — indicators of how well departments are doing in meeting their objectives and implementing their action plans — is critical for the success of this government-wide effort.

8.2 The sustainable development strategies are intended to establish the sustainable development objectives and action plans for each federal department subject to the Act. They are expected to be comprehensive, results-oriented and developed in consultation with the department's clients, partners and other stakeholders. Departments have committed to reporting annually on their progress toward sustainable development in Part III of the Estimates.

8.3 This chapter summarizes our work on performance measurement for sustainable development strategies. The purpose of this study is to advance the application of performance measurement to the management of environmental and sustainable development issues in federal government departments by summarizing key concepts and success factors and by describing the characteristics of good performance information. The study is also intended to help parliamentarians set their expectations for the strategies tabled by departments last year, and for the sustainable development aspects of departmental performance reports that will be issued annually. Parliamentarians are the main clients for the strategies and performance reports. Their visible interest in and use of this information will provide an important incentive for departments to make continual improvements to its quality.

8.4 Sustainable development involves the integration of social, economic and environmental considerations into how an organization defines its objectives and conducts its business. Government organizations have typically focussed on only one of these three dimensions — the one related to the public policy role for which each organization was established. Sustainable development also implies extending the planning horizon, consistent with considering the needs of both current and future generations. Federal government departments are now being challenged to broaden their perspective on the implications of what they do in order to protect and promote the well-being of both people and the environment that supports them.

8.5 There is no "master list" of generally applicable performance indicators for sustainable development. Rather, the starting points for departments are an assessment of their sustainable development impacts in the context of their existing public policy roles, and the goals they set to accentuate the positive aspects and mitigate the negative aspects. However, it is important that government departments work together to develop and use common indicators in areas where they are pursuing common objectives.

8.6 While the principles of sustainable development are relatively new, the principles of performance measurement and managing for results are well established and apply equally to sustainable development objectives.

Introduction

Good performance information is critical to the success of the government's sustainable development initiative

8.7 Through amendments to the *Auditor General Act*, 24 federal departments are required to prepare sustainable development strategies, table them in the House of Commons and update them every three years. The Commissioner of the Environment and Sustainable Development is responsible for monitoring the extent to which the departments subject to the Act have implemented the action plans and met the objectives associated with their strategies.

8.8 Establishing and using good performance indicators that reveal how well departments are doing in implementing their action plans and meeting their objectives is critical for the success of this government-wide effort. Therefore, an important requirement is that the strategies be results-oriented, identifying in sustainable development terms the key results departments expect to achieve, and how they will measure their performance.

8.9 This chapter is part of a much broader effort to promote results-based management in the public sector and to improve reporting to Parliament. The results orientation of the strategies is consistent with the government's proposed approach for reporting to Parliament, which is currently being tested through a pilot study. The new system is built on the idea that departments should set clear performance objectives, measure and report performance, and use that information to make programs work better.

8.10 Previous work on performance measurement by the Auditor General has found that progress is being made in reporting performance expectations and accomplishments. However, departments face a number of challenges in shifting the focus of management and measurement from inputs and activities toward the results achieved. These challenges include interpreting uncertain cause-and-effect relationships, setting clear objectives, translating those objectives into specific performance targets and indicators, and managing with incomplete information. These challenges are especially relevant to sustainable development given its broad scope.

8.11 Nevertheless, there has been sufficient progress to identify good practices and lessons learned. One of the key lessons learned from organizations that are adopting a focus on results is that results cannot be the concern of only the planners and evaluators. They must become the focal point for the organizations' senior executive leaders as well as the day-to-day actions of their managers.

Departments should set clear performance objectives, measure performance, and use that information to make programs work better.

Focus of this study

8.12 The purpose of this study is to advance the application of performance measurement to the management of environmental and sustainable development issues in federal government departments by summarizing key concepts and success factors and by describing the characteristics of good performance information. Specifically, we want to help departments and managers strengthen the results focus of their sustainable development strategies and action plans.

8.13 This chapter also summarizes our work in this area for parliamentarians. It is intended to help them set their performance measurement expectations for the sustainable development strategies and for the departmental performance reports that will be issued annually. Parliamentarians are the main clients for the strategies and performance reports. Their visible interest in and use of this information will provide an important

incentive for departments to improve its quality.

8.14 As part of this study, we developed a workbook for establishing program-level performance objectives and indicators that support the achievement of a department's strategic objectives for sustainable development. The work steps are summarized in the Appendix. The entire procedure will be made available at the Internet site for the Commissioner of the Environment and Sustainable Development: http://www.oag-bvg.gc.ca. We invite comments and suggestions for improvement. Further details on the objective, scope and approach of the study are found at the end of the chapter in **About the Study**.

8.15 For related information, see: Report of the Commissioner of the Environment and Sustainable Development, May 1998, Chapter 1 — Greening the Government of Canada – Strategies for Sustainable Development, Chapter 5 — Expanding Horizons – A Strategic Approach to Sustainable Development, Chapter 7 — Counting the Environment In, and Report of the Auditor General of Canada 1997, Chapter 5 — Reporting Performance Information in the Expenditure Management System, Chapter 11 — Moving Toward Managing for Results, and Chapter 22 — Crown Corporations: Making Performance Measurement Work.

Performance will be improved by incorporating lessons learned into strategy updates; accountability will be enhanced through annual reporting of progress.

Study Findings

Performance Measurement for Sustainable Development Strategies

What departments are required to do

8.16 Amendments to the *Auditor General Act* were intended to improve the federal government's performance in protecting the environment and promoting sustainable development as well as its accountability for that performance. Under the Act, 24 federal organizations are required to prepare sustainable development strategies, table them in the House of Commons and update them every three years.

8.17 The government also provided departments with more specific guidance to assist them in preparing their sustainable development strategies. As stated in *A Guide to Green Government*, sustainable development strategies are to be:

- comprehensive, dealing with departmental policies and programs as well as with the management of the department's internal operations;

- results-oriented, identifying in sustainable development terms the main results the department will achieve, and how it will measure performance toward them; and

- developed in consultation with the department's clients, partners and other stakeholders.

8.18 Federal departments have also committed themselves to reporting on their sustainable development performance annually, in Part III of the Estimates.

8.19 The dual objectives of improving performance and accountability mean that establishing, using and reporting performance information are critical for the success of this government-wide effort. Performance will be improved by incorporating lessons learned into annual business plans and strategy updates; accountability will be enhanced through annual reporting of progress on implementing sustainable development strategies in departmental performance reports.

Sustainable development is about broadening an organization's perspective

8.20 Sustainable development involves the integration of social, economic and environmental considerations into how an organization defines its objectives and conducts its business. Typically, government organizations have focussed on only one of these three considerations — the one related to the public policy role for which each organization was established. Sustainable development also implies a longer planning horizon, consistent with considering the needs of both current and future generations.

8.21 The government-wide sustainable development strategy process is challenging departments to take a broader perspective on the implications of what they do in order to protect and promote the well-being of people and the environment that supports them.

8.22 To provide departments with a common starting point for the identification of performance indicators, *A Guide to Green Government* presents a series of goals and objectives linked to sustainable development to which departments might contribute. These are presented in Exhibit 8.1.

8.23 There is no "master list" of generally applicable performance indicators for sustainable development. Rather, the starting point for federal departments is an assessment of their sustainable development impacts in the context of their existing public policy roles and the goals they set to accentuate the positive aspects and mitigate the negative aspects.

8.24 For example, the RCMP's mandate, under the *Royal Canadian*

The initial impact of adopting a sustainable development approach will be felt as the organization broadens its planning perspective to include social, economic, environmental and intergenerational considerations.

Exhibit 8.1

A Common Starting Point for the Identification of Targets and Performance Indicators

Goals	Objectives
Sustaining Our Natural Resources — Sustainable Jobs, Communities and Industries	• Ensuring that renewable resources development is sustainable • Ensuring efficient use of non-renewable resources
Protecting the Health of Canadians and of Ecosystems	• Virtually eliminating anthropogenic, persistent, bioaccumulative, toxic substances • Adopting a pollution prevention approach • Protecting representative areas • Maintaining a warning and response capability for natural disasters
Meeting Our International Obligations	• Protecting the ozone layer • Reducing greenhouse gas emissions • Conserving biodiversity • Supporting other international agreements
Promoting Equity	• Ensuring a fair distribution of the costs and benefits between generations • Ensuring a fair distribution of the current costs and benefits of sustainable development
Improving Our Quality of Life and Well-being	• Fostering improved productivity through environmental efficiency • Supporting innovation toward sustainable development • Broadening indicators of progress to include its non-monetary dimensions

Mounted Police Act, allows it to enforce laws, prevent crime and maintain peace, order and security. The RCMP's vision pertaining to sustainable development is "to provide the highest quality police service in Canada, in the most environmentally responsible manner possible." In its strategy for sustainable development, the RCMP assesses its sustainable development impacts in the context of its existing role and establishes its priorities including:

- communications and training;
- contracting and procurement;
- fleet management;
- green building design;
- conserving natural resources; and
- hazardous materials management.

Beginning with strategic objectives

8.25 The initial impact of adopting a sustainable development approach will be felt as the organization broadens its planning perspective to include social, economic and environmental considerations in its strategic objectives. Consultations are often used to help organizations identify relevant issues and set priorities. Exhibit 8.2 illustrates how the sustainable development strategy process meshes with the overall strategy development process.

"Cascading" through the organization

8.26 Strategic objectives provide direction to managers responsible for the more detailed planning that occurs within the organization's business and service lines. Each successive level in the organization develops action plans to contribute to the achievement of the organization's strategic objectives, and indicates how that contribution will be measured. Exhibit 8.3 illustrates this process using an example from *A Guide to Green Government*.

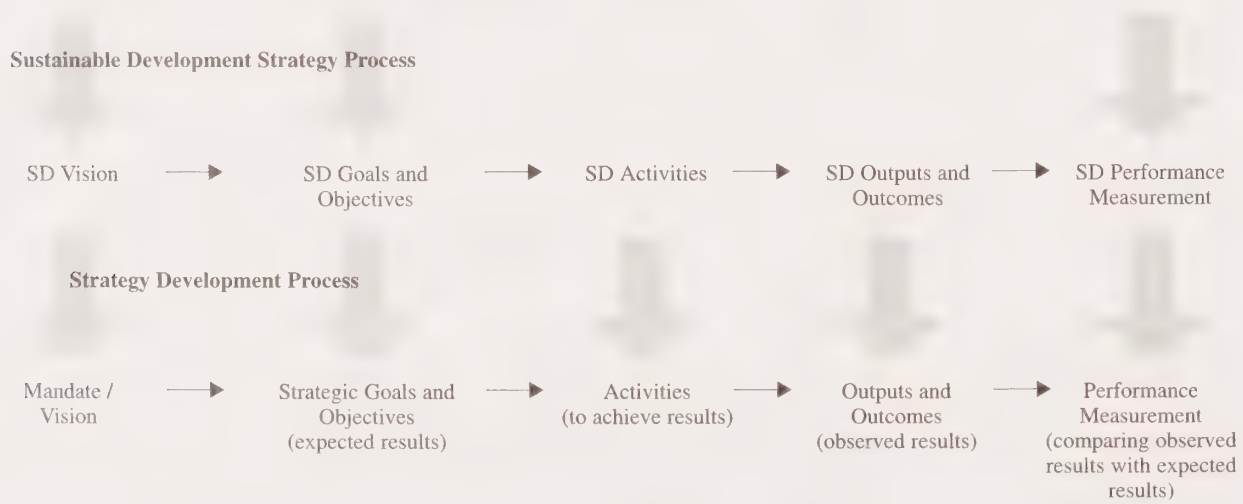
Types of indicators

8.27 While environmental and sustainable development performance

Exhibit 8.2

Integrating Sustainable Development into the Strategic Planning Process

Sustainable development (SD) issues and priorities linked to the organization's public policy role(s) (environmental, social and economic considerations)



indicators are attracting a great deal of attention, opinions on what to measure vary widely. Policy makers and others with an eye on the national picture tend to view performance in terms of a country's progress rather than an individual department's performance. Others, including some community groups and environmental organizations, are insisting on public disclosure of potential environmental risks and performance information at the site-specific level.

8.28 Three levels of environmental performance indicators identified by the International Organization for Standardization (ISO 14000) may be helpful to organizations in deciding what they should measure and report. For sustainable development, the following set is evolving to include certain "state of society" indicators as well:

- **Operational indicators** measure potential stresses on the environment (or society), as consequence of such things as the use of energy, the use of hazardous materials or the disposal of wastes.

- **Management indicators** measure the results of actions taken to eliminate or reduce potential stresses, such as an organization's programs for energy efficiency, waste reduction, pollution prevention, awareness building, participation or enforcement.

- **State-of-the-environment indicators** measure background conditions in the physical as well as the social environments, such as aspects of air or water quality, or factors related to poverty, the transfer of technology or public participation in decision making.

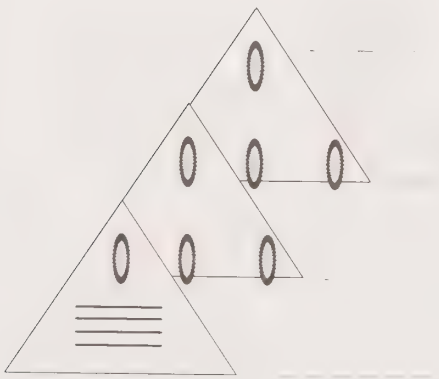
8.29 For instance, Natural Resources Canada, in its strategy for sustainable development, is proposing to assess its work at three different levels:

- At the most basic level, the Department will monitor and report on each commitment and action specified in its strategy. Performance will be assessed in terms of "did the Department do what it said it would do?"

- At a higher level, the Department will assess the extent to which its actions actually helped to accomplish the objectives identified in its strategy. For each of the strategy's objectives, the Department will report on a few indicators to help assess its achievements.

Exhibit 8.3

Aligning Performance Indicators across the Organization: An Example



Strategic Objective:
To safeguard everyone's right to a healthy environment.

Business Line Objectives:
Cleaner Air, Cleaner Land, Cleaner Water

Targets for Cleaner Air: Reduced Emissions
Nitrogen Oxides – 25% by 2005; Volatile Organic Compounds – 25% by 2005; Inhalable microparticulates – 10% by 2015

Individual objectives and measures keyed to achieving the targets

Each level of the organization should ask:
What does the strategy mean for us/me? How do we/I support it?

Initially, operational issues may present the most visible opportunities for co-ordination and harmonization of performance indicators.

- At the broadest level, the Department will move beyond its individual contributions and work with partners and stakeholders to develop indicators of Canada's overall progress toward sustainable development.

Working together to develop common indicators

8.30 Government operations have important implications for sustainable development. As an employer, landlord and purchaser, the federal government is the largest single enterprise in Canada. The way it manages its day-to-day operations and the signals it sends as a purchaser of goods and services have significant implications for resource use, the environment and sustainable development.

8.31 While departments differ substantially in terms of their policy mandates, all departments require operational support to fulfill them.

8.32 Initially, operational issues may present the most visible opportunities for co-ordination and harmonization of performance indicators across government departments. The "greening operations" component of departmental strategies is a

Exhibit 8.4

Proposed Common Indicators for Reporting Progress on "Greening Operations"

Environmental Aspects	Proposed Indicators		Additional Remarks
	Office Buildings	Other Facilities	
Water consumption	• Cubic metres per m^2 (floor area) • Dollars per year	• Cubic metres per year • Dollars per year	
Energy consumption	• Gigajoules per m^2 (floor space) per year • Dollars per year	• Gigajoules per year • Dollars per year	
Petroleum products and allied petroleum products storage tanks	• Number of tanks registered • Percent in compliance with the *Canadian Environmental Protection Act*	• Number of tanks registered • Percent in compliance with the *Canadian Environmental Protection Act*	Performance may be expressed in absolute and percentage terms.
Non-hazardous solid waste	• Kilograms of waste sent for landfill per person per year • Percent of waste diverted from landfill per year	• Tonnes of waste sent for landfill per year • Percent of waste diverted from landfill per year	Performance could be expressed in absolute terms and in relation to the National Packaging Protocol target of 50 percent reduction from 1988 (190 kilograms per person per year).
Ozone-depleting substances	• Number of reportable releases per year • Kilograms of reportable releases per year	• Number of reportable releases per year • Kilograms of reportable releases per year	Reportable as per existing and anticipated regulations.
Spills	• Number of reportable spills per year	• Number of reportable spills per year	Reportable as per existing and anticipated regulations.

See Chapter 7, Counting the Environment In, Commissioner of the Environment and Sustainable Development, 1998.

good starting point for the development of common indicators.

8.33 Ongoing efforts to harmonize performance indicators related to operational issues demonstrate the potential for developing a generally accepted set of indicators for government operations.

8.34 An interdepartmental working group has developed a proposed set of common performance indicators for six operations-related issues. The participating departments have significant custodial responsibilities. The indicators were chosen to facilitate comparisons among facilities and across departments. These indicators are presented in Exhibit 8.4 and are described in more detail in Chapter 7 of the Commissioner's Report, entitled Counting the Environment In.

Sharing experience

8.35 There is an opportunity to share experience. Similar approaches could be pursued in the policy arena, particularly where sustainable development objectives cut across departmental mandates.

8.36 We would anticipate that where departments are pursuing common objectives, consultation and consensus-seeking processes would result in an evolution toward common performance indicators.

Where departments are pursuing common objectives, they should also use common performance indicators.

8.37 A common set of performance indicators across federal departments would facilitate issue management, and reporting and oversight of the government's progress toward sustainable development. It could also assist in developing employee awareness and commitment.

The Performance Measurement Challenge

8.38 In addition to understanding the principles of sustainable development, departments need to consider some important performance measurement principles.

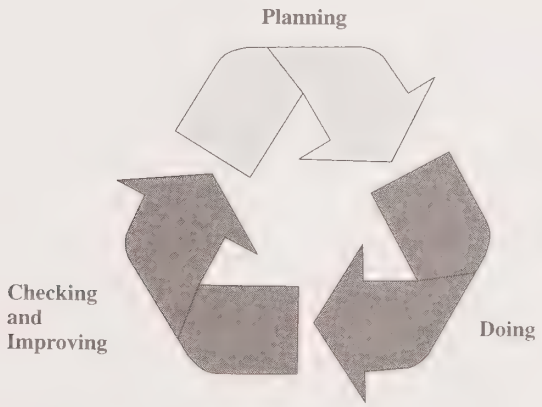


Exhibit 8.5

The "Plan-Do-Check-Improve" Management Cycle

- During the ***planning*** stage, management consults internally and externally to establish its strategic objectives and performance indicators. Strategic objectives and performance indicators provide the framework for establishing objectives, targets and action plans at each level of the organization. They also provide benchmarks for monitoring the organization's progress, and for identifying whether program adjustments are required.
- In the ***doing*** stage, management at each level facilitates implementation of the action plans.
- In the ***checking and improving*** stage, management reviews performance information to determine if the organization's actions are achieving the desired result and makes adjustments to reflect learning from program experience.

Prerequisites: a "plan-do-check-improve" management cycle

8.39 Effective performance measurement takes place as part of a cyclical management system that links an organization's objectives, actions and results. A management system that ensures employee buy-in on performance objectives and indicators, and includes systematic review, will help to reinforce a performance measurement culture. Exhibit 8.5 illustrates this "plan-do-check-improve" management cycle.

8.40 The government's expectations for such a management framework are outlined in Treasury Board Secretariat guidelines for departmental planning, reporting and accountability structures, which form part of the government's proposed Expenditure Management System — the process by which the federal government plans, budgets and seeks parliamentary approval for expenditures.

8.41 Under the present Expenditure Management System, departments produce strategic, three-year business plans that set out departmental goals, targets and performance indicators. These are submitted annually to the Treasury Board for review, and also form the basis for reporting to Parliament in the Estimates documents. Part III of the Estimates has now been split into two components: The spring Report on Plans and Priorities sets out performance expectations and general directions; the fall Performance Report provides information on results achieved.

Some key concepts

8.42 Some key performance measurement concepts are summarized in the next few sections. They draw upon a substantial body of research conducted by the Office of the Auditor General and others.

What is performance measurement?

8.43 Performance measurement assesses how well things are done and responds to the broad question: "How do we know if we are successful?" Components of this question include:

- Did we do what we said we would do? (accountability)
- Did our actions achieve the specified results? (effectiveness)
- Did we achieve these results in an efficient manner? (efficiency)
- Can we do it better? (continual improvement)

8.44 Historically, government managers have measured and reported on inputs (the resources used), processes (the activities undertaken) and outputs (the goods and services delivered or the initiatives completed). Managing for results shifts the emphasis of performance measurement and reporting to the outcomes achieved.

8.45 Chapter 11 of the Auditor General's December 1997 Report, entitled Moving Toward Managing for Results, presents a case in point. A service line within a federal government department with a mandate to investigate potentially fraudulent activities shifted from measuring its performance on the basis of investigations completed to measuring and reporting on the results of those investigations in terms of savings achieved. The case study concludes that the activities of the service line have become more transparent and are potentially more justifiable as a result of the shift in emphasis toward outcomes achieved.

8.46 While the principles of sustainable development are relatively new, the principles of performance measurement and managing for results are well established and apply equally to sustainable development objectives.

Why measure performance?

8.47 To identify opportunities for improvement. Performance measurement is a useful tool for understanding the gap between the actual level of program achievement and the results specified by performance targets. Performance measurement can provide important insights about priorities and opportunities for improvement, which can be fed back into the management cycle to achieve improved decision making.

8.48 To enhance program credibility and good will. In the absence of good performance information, stakeholders will draw their own conclusions about whether or not a government program has value. A performance measurement system is a useful tool for clarifying the scope and objectives of government programs for stakeholders, and for maintaining or restoring public confidence that government programs can make a difference in their quality of life.

8.49 To allocate and justify resources. In a similar vein, an important use of performance information is to allocate scarce resources among competing alternatives. Performance measurement can play a key role in informing Parliament and the public about the value, efficiency and cost-effectiveness of government programs.

8.50 To be accountable for public expenditures. Finally, and perhaps most important, public sector managers are entrusted with public funds to develop programs that maintain or improve a specific aspect of life. It is incumbent on them to identify the clients or stakeholders they intend to serve or target, how they intend to produce sustainable benefits or outcomes, and the indicators that can be used by stakeholders to evaluate their performance.

What is good performance information?

8.51 Good performance information allows a judgment to be made on how well things have been done. It includes both expectations and accomplishments. Exhibit 8.6 provides more detail on the characteristics of good performance information.

Good performance information allows a judgment to be made on how well things have been done.

8.52 Performance indicators should help reveal the gap between an organization's actual level of performance and the level of performance that was specified as its performance target. Performance targets might be based on a benchmark best practice, a technical standard or some specified progression from the baseline value. A set of performance indicators should support a broader explanation of performance results — a "**performance story**" for managers and executives and for the organization's various audiences.

8.53 To assist in assessing how well a program is doing, performance information should explain:

- **why** the action was expected to be beneficial;
- **who** was affected by the action;
- **what** near-term changes the action produced that contributed to achieving the long-term outcome; and
- **how** specific products, services or outputs produced these changes.

Performance information should indicate whether departments have implemented the action plans and met the commitments specified in their strategies.

8.54 Performance information for sustainable development strategies should explain the extent to which departments have implemented the action plans and met the commitments specified in their strategies. It should also explain how the resources committed to specific initiatives for achieving sustainable development objectives did or did not achieve the specified results.

Performance measurement pitfalls

While departments are gaining experience in performance measurement and a

number of recent government initiatives support a focus on results, significant challenges remain in developing good performance indicators.

8.55 Moving from measuring activities to measuring results. Much of the current reporting to Parliament consists of summarizing the activities of the department and the resources used. While probity and prudence in the use of resources are important elements of the government's management framework, it is the outcomes of activities — how they affect Canadians — that are most important for assessing whether the department is making a difference.

8.56 A program logic model can clarify the relationship between activities (how the department conducts its business), outputs (the products and services provided) and outcomes (impacts on clients, target groups or other

Exhibit 8.6

Characteristics of Good Performance Information

Attributes	Components
Relevant Evidence-based, focussed and relates to objectives	• Logical relationships exist between objectives and accomplishments. • Accomplishments are evidence-based and reported using quantitative or qualitative measures. • The focus is on outcomes, cost-related information and significant accomplishments. • Information is produced in a timely manner.
Understandable Program context, expectations and comparisons	• Program context (including the mandate, mission, external environment, programs and major strategies) is explained in relation to the objectives. • Expectations that are clear, measurable and consistent with the objectives have been set. • Comparisons between actual and expected performance are made, along with comparisons with other organizations and trends over time where appropriate. • Information sources and limitations of data, analysis and presentation are explained. • Information is selective and concise.
Attributable Explanation of the contribution being made	• Linkages between outputs and intermediate/final outcomes are explained. • The contribution made is discussed, with evidence regarding attribution and the role of external factors provided.
Accurate Appropriate data analysis and presentation	• Appropriate methods of data collection, analysis and presentation have been implemented. • The performance indicators used accurately represent what is being measured. • Conclusions are supported by evidence.
Balanced Coverage of all key aspects of performance	• All objectives are covered. • All key aspects of performance are reported: what has been achieved and how cost-effectively and efficiently, regardless of whether performance is strong or weak; significant unintended impacts; and what has been learned. • A complementary set of indicators balance/offset each other to avoid behavioural distortions.

stakeholders). Exhibit 8.7 illustrates this model.

8.57 Consultation and consensus building with stakeholders can help to establish the validity and credibility of the model and the outcome indicators.

8.58 **Translating strategic objectives into performance targets.** One of the first challenges in establishing a performance measurement system is to translate the organization's long-term strategic objectives into operational performance targets at the program level. The latter should relate clearly to the department's strategic objectives.

8.59 Clear, specific and time-bounded performance targets that are set forth in advance provide a basis for action and allow for an objective assessment of performance results.

8.60 For example, a "target level of satisfaction for 1997–98 - 80% " is documented as a *target* by a provincial government ministry in its business plan for 1997–1998. To monitor progress toward its objective, it will measure "client satisfaction with the level and quality of service provided in Northern Development Offices." The ministry's objective is to "ensure access to government programs and services in northern communities." This objective is one of several intended to achieve the policy goal of "fair and equitable administration of the Mining Act."

8.61 It is important that performance indicators relate to the performance targets. Where clear and measurable targets have not been established, departments need to identify the direction of change. Where performance indicators have not been developed, departments need to set out plans for developing them.

8.62 **Interpreting cause-and-effect relationships.** In some cases, the link between program-level activities/outputs and the organization's strategic objectives may not be transparent. Many programs seek to influence complex social, economic or environmental systems. Not all the factors affecting those systems fall within the control of any single program. Separating the influence of a program from the influence of other factors is a significant challenge.

8.63 However, to develop practical performance indicators for programs, management must define the specific results or influence that the programs can reasonably be expected to achieve. More detailed program evaluation can assist in setting those expectations. Consultations may also help to clarify the roles and

Departments need to develop a manageable set of targets and key performance indicators.

Exhibit 8.7

Performance Achievements Continuum

For a given initiative, such as consumer information, performance achievements can be viewed along a continuum as follows:

Activity →	Outputs →	Intermediate Outcomes →	Long-term Outcomes
Example: • Development of a publication on energy efficiency	• Publication distributed to customers/targeted stakeholder groups	• Publication used to make more informed decisions	• Actual energy saved as a result of using information contained in the publication. • Impact of energy savings in terms of global warming potential.

Adapted from Exhibit 10.5, Report of the Auditor General of Canada, April 1997

respective contributions of other organizations.

8.64 For instance, in 1990, the Canadian Council of Ministers of the Environment, with representation from all provinces and the federal government, endorsed the National Packaging Protocol (NaPP). The NaPP contains a commitment to six packaging policies and three milestone targets intended to conserve natural resources through the use of recovered materials, and prevent pollution through source reduction. The success of NaPP is measured in terms of tonnes of packaging waste diverted from disposal. Using 1988 as a baseline, the National Packaging Protocol set the following targets for the reduction of packaging waste in Canada: 20 percent by 1992, 35 percent by 1996, and 50 percent by the year 2000. The National Packaging Monitoring System was established to track results.

8.65 Managing with incomplete information. A review of accessible data bases, information resources and analytical capabilities is useful to understand current limitations and potential investment requirements. An information inventory and a capabilities assessment need to be undertaken to understand these issues prior to formalizing performance indicators. It is important that the limitations and weaknesses of the current data be clearly explained to users of the performance information.

8.66 Where information is incomplete, performance objectives and performance indicators should be based on the best available information, while better information is being developed.

8.67 For instance, one organization that we interviewed has begun assessing the global warming potential, the acidification potential and the ozone-depleting potential of its air emissions — including those related to energy use in fleets and office buildings. The recent availability of conversion information for various gases and ozone-depleting substances made this possible. As a result, the organization's performance in terms of environmental effects will be more meaningful. However, prior to the availability of this information, the organization based its objectives and performance indicators on the best information available. It set specific targets for reducing releases of chlorofluorocarbons (CFCs) and other "air toxics" and measured its environmental performance on the basis of thousands of pounds of emissions per year.

8.68 Completeness versus overload. One of the key challenges an organization faces when establishing a set of performance indicators is how to strike an appropriate balance between providing a comprehensive picture of the organization's performance and overloading decision makers with information.

8.69 A complete set of indicators covers all aspects of performance that influence an organization's success. But if performance indicators are to be useful for decision makers and stakeholders, they must also be selective and focussed. Managers need to think in terms of the users' needs and their potential uses of performance indicators.

8.70 One way of balancing completeness and overload is to develop a set of *key indicators* linked to the organization's strategic objectives. Key indicators focus on the organization's success in fulfilling its public policy mandate.

8.71 For example, "emission levels (tonnes) of smog-causing pollutants" is documented as a *key performance measure* by a provincial government ministry in its business plan for 1997–1998. This key performance measure is linked to a specific, time-bounded and measurable target that in turn is linked to the strategic objective of "cleaner air". The objective of "cleaner

air" is one of several objectives linked to the policy goal "to safeguard everyone's right to a healthy environment."

8.72 Key indicators can also be used by the organization's executive to help in directing the organization. In addition, they can provide the basis for reporting and accountability to ministers, Parliament and the public. We would expect key sustainable development indicators to be presented in the sustainable development strategies alongside the corresponding objectives and targets.

8.73 The key indicators would form the basis for more detailed objectives and indicators at each successive level in the organization. Managers at each level would establish indicators that reflect how their actions contribute to the achievement of the organization's objectives, and how that achievement will be measured. These indicators would be used for internal management purposes.

8.74 If there is a proliferation of "priorities" or if the organization's long-term objectives are not clear, it will be difficult to develop a manageable set of targets and key performance indicators. Establishing the organization's strategic priorities and setting clear objectives is therefore a prerequisite for an effective performance measurement system.

Keys to implementing a performance measurement system

8.75 Our research revealed a range of factors critical for successful implementation of a performance measurement system.

8.76 **Top management support.** The commitment and leadership of senior management are the most commonly cited, and perhaps the most important, success factors for effective performance measurement. Clear, consistent and visible involvement by senior executives and managers at every level is needed to translate strategic objectives into operational performance targets and indicators.

8.77 It is also important to appoint a key person to be responsible for co-ordinating the department-wide performance measurement efforts, synthesizing the different inputs and maintaining contact with other individuals responsible for measurement across the organization (and in other departments). This institutional arrangement reinforces a performance measurement culture and facilitates documentation of overall results and the creation of an "institutional memory."

8.78 In the long term, performance measurement efforts will succeed only with the strong commitment of political and senior executive leaders. Only they can ensure that each department's strategic objectives and performance indicators become the basis for its day-to-day operations.

8.79 **Alignment of objectives and indicators across the organization.** Performance indicators can play a key role in focussing the efforts of managers on the organization's strategic priorities. To be effective in this regard, objectives and indicators created at successively lower points in the organizational hierarchy need to be built upon and aligned with those at higher levels. Managers at each level should take their cue from the managers above them and there should be direct linkages between objectives and key indicators at the strategic level and those at other levels throughout the organization.

8.80 The emphasis of sustainable development on policy integration implies that federal departments need to co-operate to achieve outcomes that individually they could only partially influence. Departments need to co-ordinate their efforts at the national level as well as between levels of government to ensure that programs are

Performance measurement efforts will succeed only with the strong commitment of political and senior executive leaders.

It is important to appoint a key person to be responsible for performance measurement.

Federal departments need to co-operate to achieve outcomes that individually they could only partially influence.

consistent with sustainable development objectives, that objectives and performance indicators are complementary and that program efforts are mutually reinforcing.

8.81 Internal communication. Internal communication provides the link between planning and practice. Managers at each level of the organization need to understand their role in achieving the strategic objectives in order to set and communicate program objectives that are aligned with them. The more clearly objectives are communicated at each level, the easier it is for employees to determine what needs to be done.

Feedback provided by performance measurement should contribute to the learning process.

8.82 Use measurement to improve performance. Performance measurement should help managers identify what works and what does not, so that they may encourage and improve on what is working and discourage or replace what is not.

8.83 Performance measurement represents a significant investment of resources and will provide a return on that investment only if the resulting information is fed back into the decision-making process.

8.84 It is important that performance measurement facilitate learning, inspire confidence and be positive, not punitive. It has a significant role to play in encouraging creative and successful action and in ensuring that credit is given where credit is due.

The visible interest in and use of sustainable development performance information by parliamentarians will provide an important incentive for departments to improve its quality.

8.85 Awards and recognition. The involvement of senior management in awards and recognition programs strengthens the perception that top management supports the initiatives and values performance. Good award and recognition programs can engender healthy competition between organizational units and reinforce both the level of effort and the use of indicators to demonstrate performance. They can have a significant impact on employee morale and, in turn, on motivation and performance.

Conclusion

8.86 Sustainable development has been characterized as a journey rather than a destination. Since the relationships among environmental, social and economic issues are complex and continually evolving, there is a real need for continuous learning and innovation. Feedback provided by performance measurement should contribute to the learning process.

8.87 Departmental sustainable development strategies are to be revised every three years to reflect new developments as well as past achievements. The development of performance objectives and indicators for sustainable development strategies will therefore be an ongoing activity.

8.88 There is no "master list" of generally applicable performance indicators for sustainable development. However, as in any area of public policy, parliamentarians expect good performance information, including both expectations and accomplishments, that allows a judgment to be made on how well things have been done.

8.89 A common set of performance indicators across the federal system would facilitate issue management, and reporting and oversight of the government's progress toward sustainable development. It would also assist in developing employee awareness and commitment to sustainable development objectives at all levels.

8.90 Good performance information is critical to the success of the government-wide sustainable development effort. To make progress toward their sustainable development objectives, managers need good information on what works and what does not, so that they may reinforce and improve on what is working

and discourage or replace what is not. Central agencies and Parliament also need good performance information to fulfil their mandates and exercise their oversight function. In the absence of feedback provided by good performance indicators, progress toward objectives is difficult to manage, monitor or substantiate.

8.91 Parliamentarians are the main clients for the sustainable development strategies and performance reports. Through amendments to the *Auditor General Act* (1995), they established the requirement for departments to table sustainable development strategies, and created the position of Commissioner of the Environment and Sustainable Development to monitor them. The visible interest in and use of sustainable development performance information by parliamentarians will provide an important incentive for departments to improve its quality.

8.92 Improving the capacity of departments to produce clear, measurable and outcome-oriented performance information should help to improve sustainable development decision making, accountability and governance across federal departments.



About the Study

Objective

The overall objective of this study was to support the achievement of sustainable development objectives by helping managers within federal departments move from their sustainable development strategies to implementation at the program level by summarizing key concepts and success factors and describing the characteristics of good performance information.

Scope and Approach

Our research started with a review of previous propositions and observations on sustainable development and performance measurement, including previous work by our Office. We then developed a series of work steps to assist departmental managers at the program level in developing performance indicators that could be used for internal management purposes to support the achievement of the department's sustainable development strategy. The work steps are summarized in the Appendix.

Each of the work steps was reviewed and refined through a series of five half-day interdepartmental workshops. Workshop participants included representation from a broad cross-section of federal departments. Participants were asked to test the validity of each work step between workshops, in the context of sustainable development work already proceeding in their departments. The complete workbook will be made available at the Office of the Auditor General of Canada web site: http://www.oag-bvg.gc.ca.

In addition to summarizing key concepts, success factors and criteria previously documented, the study also incorporated practical considerations raised through a series of interviews with six organizations outside the federal government, which are actively practising environmental management and sustainable development.

Study Team

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Appendix

Developing Program-Level Performance Indicators for Sustainable Development Strategies

How the work steps were developed

As part of this study, we developed a set of work steps for establishing performance indicators for sustainable development strategies. The work steps are designed to assist departmental managers at the program level in developing performance targets and indicators that support the achievement of their department's sustainable development strategy. The program level performance indicators developed through the work steps could be used for internal management purposes to manage a program's contribution to the strategy.

Each of the work steps was reviewed and refined through a series of five half-day interdepartmental workshops. Workshop participants included representation from a broad cross-section of federal departments and agencies. Participants were asked to test the validity of each work step between workshops, in the context of sustainable development work already proceeding in their departments.

The work steps are summarized in the following chart. The entire procedure will be made available at the web site for the Commissioner of the Environment and Sustainable Development: http://www.oag-bvg.gc.ca. We invite comments and suggestions for improvements.

Getting started

The reference point for beginning the work steps is the department's sustainable development strategy. A process for developing sustainable development strategies, complete with strategic objectives, is presented in *A Guide to Green Government*. If the Guide has been followed, the department's strategy should define the sustainable development objectives and performance indicators for the department as a whole.

The objectives set forth in the department's strategy should provide direction to managers within the department's business and service lines.

The principle of "alignment" — the idea that there must be direct links between the strategic objectives set by the department and the targets, action plans and performance indicators at each successive level in the department — forms the basis of the approach.

Developing Program-Level Performance Indicators for Sustainable Development Strategies

Understanding Your Program	Explain the logical connection between the strategic objectives of the department and the program or action by addressing the following questions: • **WHY** is the program or action relevant to achieving the long-term objective(s) specified in the department's sustainable development strategy? • **WHO** does the program or action intend to influence or serve? • **WHAT** results does the program expect to produce? • **HOW** do specific activities and outputs deliver the expected results?

Use the answers to these questions to:

Establish Good Performance Indicators	Performance indicators help to clarify the gap between actual program achievements and the level of achievement specified by a performance target. • What are the best indicators of your program's performance? Identify the most significant indicators of your program's contribution to the sustainable development strategy. • Realistically, what can be measured and what is the starting point? Establish information capabilities and a baseline for each indicator. • Do the indicators cover the key aspects of the program's performance? Ensure that all key performance considerations are addressed and that there are no costly measurement redundancies or gaps. • Do the performance indicators possess the right attributes? Good performance indicators are **meaningful**, **reliable** and **practical**. ◦ A **meaningful** indicator is understandable by its audience, relevant to the objectives being pursued and the users' needs, and comparable over time and with other similar organizations. ◦ A **reliable** indicator accurately represents what is being measured, balances (complements) other indicators, is free from bias, and is not susceptible to manipulation. ◦ A **practical** indicator is one that yields timely information at reasonable cost.

Performance indicators should support a broader explanation of performance results — a **"performance story"** — for managers and executives and for the organization's various audiences. Performance information should explain how the resources committed to specific initiatives for achieving sustainable development objectives did or did not achieve the specified results. A set of performance indicators will likely be required to provide a coherent performance storyline traced by "Why, Who, What and How".

To be effective in promoting improved performance, the results of performance measurement must be fed back into the management cycle.

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – 1998

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